

BALDWIN LOCOMOTIVE WORKS

LOCOMOTIVE DETAILS

AND

TELEGRAPHIC CODE

FOR

DUPLICATE PARTS

1906



Class TJ625

Book , P 4
1905

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BALDWIN LOCOMOTIVE WORKS

ILLUSTRATED CATALOGUE

DETAILS

OF

LOCOMOTIVES

AND

CABLE CODE

FOR DUPLICATE PARTS

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BURNHAM, WILLIAMS & CO.

PHILADELPHIA

GEORGE BURNHAM
WILLIAM P. HENSZEY

JOHN H. CONVERSE
WILLIAM L. AUSTIN
SAMUEL M. VAUCLAIN

ALBA B. JOHNSON
GEORGE BURNHAM, JR.

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Introductory

IT is intended in this publication to place before customers a work that may be found useful for ready reference in ordering duplicate parts of locomotives for renewals and repairs, and at the same time furnish such a complete record of names of the various parts comprising a locomotive and tender as will avoid the possibility of error in ordering supplies, from a misinterpretation of these names.

It is intended that the illustrations and their descriptions shall be so clear that no difficulty will be experienced in following the catalogue of names for any pieces that it may be found necessary to order. Instructions for cabling are also given so that the expense of ordering duplicate parts from a distance will be reduced as much as possible.

The system of manufacture employed in connection with the large number of machines at all times in process of construction, embracing the principal classes, insures unusual and especial facilities for filling orders at once, or with the least possible delay.

All work is accurately fitted to gauges which are made from a system of standards kept exclusively for the purpose, thus providing for like parts fitting accurately in all locomotives of the same class. This plan of interchangeability enables the customer to secure the maximum amount of service at the minimum cost for repairs.

The advantages resulting from these methods are apparent in the expense of maintenance and repairs and in the saving of expensive patterns, drawings, special tools, and shop room. Repairs can be made with the utmost promptness, and engines thus be kept in almost continuous service.

Class Designations

EACH locomotive has the builder's number plate attached to sides of smokebox directly over steam chests, except in small engines of special designs, when it is placed on smokebox door, or in some other conspicuous position. This plate contains the name of the manufacturers, the consecutive construction number of the engine, and the year in which constructed.

In ordering parts, in all cases where it is possible to do so, this construction number should be given, and when this cannot be obtained, the original road number or name should be supplied. This information will assist in ready reference to original records of construction and facilitate the work of renewals.

The different classes of locomotives are designated by a combination of figures with one of the letters A, B, C, D, E, or F, to indicate both the plan and sizes, as follows:

The letter A indicates that there are no traction driving wheels, and that the locomotive is driven by gear wheels engaging in a rack-rail or rails.

The letter B indicates that two wheels are connected as driving wheels.

The letter C indicates that four wheels are connected as driving wheels.

The letter D indicates that six wheels are connected as driving wheels.

The letter E indicates that eight wheels are connected as driving wheels.

The letter F indicates that ten wheels are connected as driving wheels.

A figure (4, 6, 8, 10, 12, or 14) is used to denote the whole number of wheels under the locomotive.

A figure or figures, following the figures indicating the whole number of wheels, indicates the diameter of cylinders, viz. :

8 indicates cylinders		7 inches in diameter.	
10	" "	8	" " "
12	" "	9	" " "
14	" "	10	" " "
16	" "	11	" " "
18	" "	12	" " "
20	" "	13	" " "
22	" "	14	" " "
24	" "	15	" " "
26	" "	16	" " "
28	" "	17	" " "
30	" "	18	" " "
32	" "	19	" " "
34	" "	20	" " "
36	" "	21	" " "
38	" "	22	" " "
40	" "	23	" " "
42	" "	24	" " "

Thus 8-26 C indicates an eight-wheeled locomotive, having four wheels coupled, and cylinders sixteen inches in diameter; 8-26 D indicates an eight-wheeled locomotive, having six wheels coupled, and cylinders of the same diameter; and 10-34 E, a ten-wheeled locomotive having eight wheels coupled, and cylinders twenty inches in diameter.

The same rule applies to Baldwin four cylinder compound locomotives (Vauclain system). Thus 10- $\frac{22}{42}$ D indicates a ten-wheeled locomotive, having six wheels coupled, a fourteen inch high-pressure cylinder on each side, and a twenty-four inch low-pressure cylinder on each side. (For arrangement of cylinders, see Plate 6.)

The addition of the fraction $\frac{1}{4}$ indicates that there is a truck at each end of the locomotive. Thus 8-26 $\frac{1}{4}$ C indicates an eight-wheeled loco-

motive, having four wheels coupled, cylinders sixteen inches in diameter, and a two-wheeled truck at each end.

The addition of the fraction $\frac{1}{3}$ indicates that the engine is on the "Forney" plan, having the truck back of the firebox. Thus 8-26 $\frac{1}{3}$ C indicates an eight-wheeled locomotive, having four wheels coupled, cylinders sixteen inches in diameter, and a four-wheeled truck back of the firebox. 6-26 $\frac{1}{3}$ C indicates a six-wheeled locomotive, having four wheels coupled, cylinders sixteen inches in diameter, and a two-wheeled truck back of the firebox.

The figures following the class designation, as found on every locomotive, give the class number for that locomotive, and supply an individual designation for it, in addition to the construction number. Thus 8-26 C 500 means the five-hundreth locomotive of the 8-26 C class.

Instructions for Cabling

The cable address of these Works is, "**Baldwin, Philadelphia.**"

All code words relating to duplicate parts begin with the letter "E."

Each of the tables accompanying the plates in this book has in large heavy letters opposite the plate number a code word, the use of which indicates that all the parts shown on the plate are required; and each of the items has opposite it a code word in small heavy letters indicating that only that particular piece is needed.

In all cases it is understood that a set or enough for one locomotive will be sent unless specific instructions to the contrary are given.

On pages 33-41 a list will be found of duplicate parts in groups, such as are generally ordered, with a code word corresponding to each group.

In answering inquiries for prices, the cost is made for delivery f. o. b. vessel in Philadelphia or New York unless otherwise indicated.

The construction or consecutive number of the locomotive should be used in cabling and in writing orders. This is shown on the builder's plates, which are generally on the smoke-box above the cylinders. Code words corresponding to construction numbers will be found in the tables herewith (pages 15-23), which range from 1 to 45,000 (from 1 to 1000 inclusive proceeding by units, and from 1000 to 45,000 proceeding by thousands).

Words consisting of more than ten letters are counted as two words. When the name of a railway or firm embraces two or more words containing ten letters or less in all, they can be cabled as one: for instance, "**Costarica** Railway" (two words), meaning Costa Rica Railway.

It is a rule of all telegraph companies that in cabling, three figures count as one word. Therefore, any construction number can be cabled in two words: for instance, 13 975 (13975), which would be counted two words. Inasmuch, however, as figures are more apt to be improperly transmitted than words, a table has been prepared (see page 15) by the use of which construction numbers can still be given in two words and some of them in one, these words being less liable to misconstruction than the figures.

Messages should be written very plainly, so that there can be no doubt as to the word used, and no possibility of the division of one word into two.

Upon application a code word will be assigned, representing the name of any railroad company or firm desiring to do business by cable with the Baldwin Locomotive Works.

Example: The construction number 6000 would be one word, "Eenlobbig;" while 6020 would be "Eenlobbig Earthworms," and 12540 "Eensgezind Ecofora" ("Eensgezind" standing for 12,000 and "Ecofora" for 540). 6020 could also be 6 020, and 12540 be 12 540; but the word method is preferable.

Example: If it be desired to cable for a boiler complete, as shown on Plate 1, for engine 13978, to be shipped by steamer to Havana, Cuba, the message would read as follows (the signature should be the name of the company ordering or its code word).

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans

Encotyle

Eerewoord

Eensklaps

Eenbladig

(Signed) (Code name or actual name of Company)

Translation :

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans . . Please ship by steamer as soon as possible duplicate parts covered by code word.

Encotyle . . Boiler and all parts on Plate 1.

Eerewoord . . For one locomotive, construction number

Eensklaps . }
Eenbladig . } 13978.

(Name of Company)

But if a set of tubes were wanted, the message would read :

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans
Encravacao
Eerewoord
Eensklaps
Eenbladig

(Signed) (Code name or actual name of Company)

Translation :

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans . . Please ship by steamer as soon as possible duplicate
parts covered by code word.

Encravacao . Boiler tubes.

Eerewoord . . For one locomotive, construction number.

Eensklaps . }
Eenbladig . } 13978.

(Name of Company)

If three sets of tubes were wanted for the same locomotive, or for locomotives of the same dimensions, the message would read :

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans
Encravacao
Eergierig
Eensklaps
Eenbladig

(Signed) (Code name or actual name of Company)

Translation :

HAVANA, January 10, 1905.

BALDWIN, Philadelphia.

Eerekrans . . Please ship by steamer as soon as possible duplicate parts covered by code word.

Encravacao . Boiler tubes.

Eergierig . . For three locomotives, construction number

Eensklaps . }
Eenbladig . } 13978.

(Name of Company)

To order a pair of cylinders from Rio de Janeiro, Brazil, with parts attached, a message would read :

RIO, March 1, 1905.

BALDWIN, Philadelphia.

Eerekroon

Effricatum (See page 33.)

Eensdeels

Eddaic

(Signed) (Code name or actual name of Company)

Translation :

RIO, March 1, 1905.

BALDWIN, Philadelphia.

Eerekroon . . Please ship by steamer as soon as possible duplicate parts covered by code word (see *) for locomotive, construction number (see**).

Effricatum . . * 1 pair cylinders with heads, covers, chests, caps, casings, glands, valves, yokes and pistons, painted and varnished.

Eensdeels . }
Eddaic . . . } ** 11743.

(Name of Company)

A cable message from Yokohama, Japan, for a crosshead for left side of locomotive 14126, would read as follows :

YOKOHAMA, March 22, 1905.

BALDWIN, Philadelphia.

Eeredienst
Endosmic
Eeretomben
Eensnarig
Eboueuses

(Signed) (Code name or actual name of Company)

Translation :

YOKOHAMA, March 22, 1905.

BALDWIN, Philadelphia.

Eeredienst . . Please ship by quickest freight route as soon as possible
duplicate parts covered by code word.

Endosmic . . Crosshead.

Eeretomben . For left hand side of one locomotive, construction
number

Eensnarig . }
Eboueuses . } 14126.

(Name of Company)

To order an eccentric strap from Rio de Janeiro, Brazil, for locomotive 10055, a message would read :

RIO, March 1, 1905.

BALDWIN, Philadelphia.

Eerekrans
Endrudge
Eeresabels
Eenschalig
Ebaucheras
Eerstdaags

(Signed) (Code name or actual name of Company)

Translation:

RIO, March 1, 1905.

BALDWIN, Philadelphia.

Eerekrans . . Please ship by steamer as soon as possible duplicate
parts covered by code word.

Endrudge . . Eccentric strap.

Eeresabels . . For right hand side of one locomotive, construction
number

Eenschalig }
Ebaucheras } 10055.

Eerstdaags . . Backward motion.

(Name of Company)

Cable Code Numbers

1 Eachwhere	35 Ebahi	69 Ebdomada
2 Eactarius	36 Ebalacon	70 Ebelians
3 Eadberty	37 Ebalette	71 Ebenaceo
4 Eadburge	38 Ebanacee	72 Ebenastre
5 Eadwin	39 Ebanista	73 Ebenbild
6 Eager	40 Ebanizar	74 Ebeneous
7 Eagerly	41 Ebankers	75 Ebenezer
8 Eagerness	42 Ebano	76 Ebenfalls
9 Eagrass	43 Ebanoyer	77 Ebenheit
10 Eanred	44 Ebaque	78 Ebeni
11 Eapse	45 Ebarbement	79 Ebenier
12 Earinus	46 Ebarbeuse	80 Ebenistes
13 Earshrift	47 Ebarboir	81 Ebenmass
14 Earthiness	48 Ebaroui	82 Ebenoxyle
15 Earthling	49 Ebattons	83 Ebenrecht
16 Earthly	50 Ebattriez	84 Ebensohle
17 Earthquake	51 Ebattront	85 Ebenspiel
18 Earthward	52 Ebattu	86 Ebenuz
19 Earthwork	53 Ebaubi	87 Ebenwage
20 Earthworms	54 Ebauchage	88 Eberesche
21 Earwig	55 Ebaucheras	89 Ebergement
22 Earwort	56 Ebauchiez	90 Eberhard
23 Easeful	57 Ebauchoir	91 Eberhirsch
24 Easels	58 Ebbeanker	92 Eberlue
25 Easily	59 Ebbeboom	93 Eberulf
26 Easiness	60 Ebbene	94 Ebetazione
27 Easium	61 Ebbenhout	95 Ebetement
28 Easterling	62 Ebbero	96 Ebeto
29 Easterly	63 Ebbestrom	97 Ebeurrer
30 Eastward	64 Ebbezeit	98 Ebeylieres
31 Eatable	65 Ebbing	99 Ebiasaph
32 Eatage	66 Ebbrezza	100 Ebionisme
33 Eauzan	67 Ebbrieta	101 Ebiscum
34 Eavagier	68 Ebbrioso	102 Ebisele

103 Eblana	145 Ebraizzare	187 Ebruitiez
104 Eblandior	146 Ebraizzava	188 Ebruitons
105 Eblanditus	147 Ebraizzo	189 Ebrulpho
106 Eblanine	148 Ebrancadas	190 Ebucheter
107 Eblouimes	149 Ebrancado	191 Ebudae
108 Eblouir	150 Ebranchait	192 Ebulinus
109 Eblouiras	151 Ebranchiez	193 Ebulliate
110 Eblouired	152 Ebranchons	194 Ebullicao
111 Eblouiront	153 Ebranlait	195 Ebulliciency
112 Eblouisses	154 Ebranler	196 Ebullition
113 Eboda	155 Ebranliez	197 Ebulo
114 Ebonist	156 Ebranlions	198 Eburacum
115 Ebonite	157 Ebrasure	199 Eburatus
116 Ebonized	158 Ebreche	200 Eburinorum
117 Eboraci	159 Ebreneur	201 Eburiphore
118 Eboracum	160 Ebria	202 Eburnation
119 Eborarios	161 Ebriacus	203 Eburnean
120 Eborensen	162 Ebriation	204 Eburneos
121 Eborgnage	163 Ebriativo	205 Eburninae
122 Eboribus	164 Ebriato	206 Eburobriga
123 Ebosia	165 Ebriavisti	207 Eburodunum
124 Ebouage	166 Ebriedad	208 Eburon
125 Eboueur	167 Ebrietas	209 Eburones
126 Eboueuses	168 Ebriety	210 Eburovices
127 Ebouffer	169 Ebrieux	211 Ebusus
128 Ebouiger	170 Ebrillade	212 Ecabochage
129 Ebouilli	171 Ebriosa	213 Ecabocher
130 Eboulait	172 Ebriosidad	214 Ecachement
131 Eboulee	173 Ebriositas	215 Ecaffer
132 Eboulement	174 Ebriosos	216 Ecafignon
133 Ebouleront	175 Ebrious	217 Ecaflote
134 Ebouleux	176 Ebriulatus	218 Ecagne
135 Ebouqueter	177 Ebrodunum	219 Ecaillage
136 Ebouriffe	178 Ebroin	220 Ecaillaire
137 Ebouisine	179 Ebromagi	221 Ecaille
138 Ebouter	180 Ebromagus	222 Ecaillette
139 Ebouture	181 Ebrondeur	223 Ecalcarate
140 Ebraiche	182 Ebrosser	224 Ecaler
141 Ebraico	183 Ebrouait	225 Ecalisseur
142 Ebraismo	184 Ebrouement	226 Ecalyptre
143 Ebraisoir	185 Ebruiter	227 Ecangage
144 Ebraizzano	186 Ebruiteras	228 Ecanguer

229 Ecaqueur	271 Eccessivo	313 Ecfonesi
230 Ecarasse	272 Eccettuano	314 Ecfrassi
231 Ecarquille	273 Eccettuare	315 Ecgonine
232 Ecarrure	274 Eccettuava	316 Echacantos
233 Ecart	275 Eccheuma	317 Echacorvos
234 Ecartais	276 Ecchymose	318 Echadico
235 Ecartasses	277 Ecchymosis	319 Echadores
236 Ecartelait	278 Eccillum	320 Echaduras
237 Ecarteler	279 Eccitammo	321 Echafaud
238 Ecartement	280 Eccitando	322 Echafauder
239 Ecarterais	281 Eccitarla	323 Echaillon
240 Ecarteriez	282 Eccitarono	324 Echalas
241 Ecarteur	283 Eccitassi	325 Echalasser
242 Ecartons	284 Eccitata	326 Echamiento
243 Ecatisage	285 Eccitativo	327 Echampeau
244 Ecaude	286 Eccitatore	328 Echampi
245 Ecauvage	287 Eccitavamo	329 Echamplure
246 Ecbalion	288 Eccitavate	330 Echancrais
247 Ecballium	289 Ecciterai	331 Echancrant
248 Ecbasis	290 Eccitero	332 Echancrure
249 Ecbatic	291 Eccitolla	333 Echando
250 Ecbibi	292 Ecclesia	334 Echandole
251 Ecbibitum	293 Ecclesians	335 Echanges
252 Ecbirsoma	294 Ecclesiola	336 Echangiez
253 Ecbolade	295 Ecclinuse	337 Echangions
254 Ecbolique	296 Eccopeur	338 Echangiste
255 Ecbyrsome	297 Eccrisis	339 Echapellas
256 Eccanthis	298 Eccycleme	340 Echapoter
257 Eccedemmo	299 Ecderon	341 Echappade
258 Eccedendo	300 Ecdicus	342 Echappiez
259 Eccedenza	301 Ecdippa	343 Echappons
260 Eccederai	302 Ecdique	344 Echarbon
261 Eccedero	303 Ecdore	345 Echarnoir
262 Eccedessi	304 Ecdurorum	346 Echarpes
263 Eccedevamo	305 Ecdysies	347 Echarseter
264 Eccedevate	306 Ecelenore	348 Echauboule
265 Eccediate	307 Ecepper	349 Echaudoir
266 Eccedo	308 Ecerner	350 Echauffer
267 Eccehomo	309 Ecerveler	351 Echauffure
268 Ecceite	310 Ecetera	352 Echaulant
269 Eccentric	311 Ecfisa	353 Echaux
270 Eccentros	312 Ecfisesi	354 Echazones

355 Echeable	397 Echinome	439 Echtbreuk
356 Echeancier	398 Echinomys	440 Echteband
357 Echebulus	399 Echinopo	441 Echtebed
358 Echeclea	400 Echinopode	442 Echtelijk
359 Echebrates	401 Echinorhin	443 Echtgareel
360 Echechs	402 Echinozoa	444 Echtgenoot
361 Echedamia	403 Echinulate	445 Echttheit
362 Echeggia	404 Echinus	446 Echthre
363 Echeggiano	405 Echinussa	447 Echting
364 Echeggiare	406 Echionides	448 Echtkoets
365 Echeggiava	407 Echiopsis	449 Echtwort
366 Echelades	408 Echiquete	450 Echura
367 Echelaos	409 Echite	451 Ecidine
368 Echelidae	410 Echiuride	452 Ecimable
369 Echelonner	411 Echkendji	453 Eckard
370 Echeneide	412 Echmagoras	454 Eckband
371 Echeneidis	413 Echnomos	455 Eckbert
372 Echeniller	414 Echoes	456 Eckehard
373 Echephron	415 Echoicus	457 Eckelhaft
374 Echepolis	416 Echoing	458 Eckeln
375 Echeveria	417 Echome	459 Eckenhalm
376 Echevinage	418 Echometer	460 Eckenzahl
377 Echidna	419 Echometria	461 Eckerganz
378 Echidnine	420 Echometro	462 Eckermast
379 Echidorus	421 Echonele	463 Eckhaus
380 Echignole	422 Echopolus	464 Eckkegel
381 Echimyde	423 Echoppage	465 Ecklade
382 Echimyside	424 Echoppe	466 Ecklonie
383 Echinacee	425 Echoton	467 Eckplatz
384 Echinaria	426 Echouage	468 Ecksaal
385 Echinated	427 Echouais	469 Ecksaeulen
386 Echinidae	428 Echouasses	470 Eckschuh
387 Echinidans	429 Echouer	471 Eckstamm
388 Echinipede	430 Echouerais	472 Eckstein
389 Echinital	431 Echoueriez	473 Eckthor
390 Echinite	432 Echoueront	474 Ecktisch
391 Echinocere	433 Echouiez	475 Eckzahn
392 Echinoderm	434 Echouons	476 Eclactisme
393 Echinodore	435 Echrefite	477 Eclaffer
394 Echinogale	436 Echsenbrut	478 Eclair
395 Echinogyne	437 Echsenei	479 Eclairage
396 Echinoide	438 Echtbreken	480 Eclairais

481	Eclairci	523	Eclogarius	565	Ecorchant
482	Eclaircise	524	Eclogarum	566	Ecorchasse
483	Eclairons	525	Eclopper	567	Ecorcheler
484	Eclampsy	526	Eclore	568	Ecorchiez
485	Eclanche	527	Ecloses	569	Ecorcons
486	Eclandre	528	Eclosion	570	Ecornifle
487	Eclapsia	529	Eclusa	571	Ecossain
488	Eclapside	530	Eclusement	572	Ecossaises
489	Eclatable	531	Ecmatyrje	573	Ecossoneux
490	Eclatais	532	Ecmelia	574	Ecotado
491	Eclateriez	533	Ecnephias	575	Ecotant
492	Eclatons	534	Ecnomus	576	Ecotard
493	Ecleche	535	Ecobuer	577	Ecouailles
494	Eclecticos	536	Ecochelage	578	Ecouanette
495	Eclectique	537	Ecocheler	579	Ecouchures
496	Eclectiser	538	Ecoeurant	580	Ecoulard
497	Eclectisme	539	Ecoeurer	581	Ecoulera
498	Eclectizar	540	Ecofora	582	Ecoulerait
499	Eclegma	541	Ecofrai	583	Ecourgee
500	Ecleptis	542	Ecoica	584	Ecourgeon
501	Eclesiarca	543	Ecoicos	585	Ecourtant
502	Eclettismo	544	Ecoincon	586	Ecoussage
503	Eclidon	545	Ecolage	587	Ecoutames
504	Ecligmata	546	Ecole	588	Ecoutasses
505	Ecligmatis	547	Ecolerer	589	Ecouterais
506	Ecligmatum	548	Ecoliers	590	Ecouterons
507	Eclingure	549	Ecometria	591	Ecouteur
508	Eclipsable	550	Ecometro	592	Ecoutille
509	Eclipsais	551	Econduirai	593	Ecoutillon
510	Eclipsar	552	Economat	594	Ecoutoir
511	Eclipsaron	553	Economicas	595	Ecouvette
512	Eclipse	554	Economico	596	Ecphasis
513	Eclipsons	555	Economique	597	Ecphlysis
514	Eclipticus	556	Economist	598	Ecphoneme
515	Eclissage	557	Economizar	599	Ecphonesis
516	Eclissammo	558	Economize	600	Ecphora
517	Eclissando	559	Econtrario	601	Ecphorarum
518	Eclissassi	560	Econverso	602	Ecphoris
519	Eclissava	561	Ecoper	603	Ecphorome
520	Eclisser	562	Ecoperche	604	Ecphractic
521	Eclisso	563	Ecoquer	605	Ecphraste
522	Eclittica	564	Ecorcage	606	Ecphyma

607 Ecphymote	649 Ecriturer	691 Ectopogono
608 Ecphyse	650 Ecrivaille	692 Ectopones
609 Ecphysese	651 Ecrivimes	693 Ectosarc
610 Ecpiema	652 Ecroe	694 Ectosmie
611 Ecpiesme	653 Ecroistre	695 Ectozoa
612 Ecpleope	654 Ecrouellet	696 Ectrogenie
613 Ecplerome	655 Ecrouir	697 Ectromata
614 Ecplessia	656 Ecroutage	698 Ectromatis
615 Ecplexie	657 Ecrysie	699 Ectrome
616 Ecпноe	658 Ecsarcome	700 Ectroparum
617 Ecpyeme	659 Ecstacy	701 Ectropical
618 Ecpyesis	660 Ecstasize	702 Ectropio
619 Ecpyetique	661 Ecstatic	703 Ectrotico
620 Ecpyrosis	662 Ecstatical	704 Ectrotique
621 Ecqui	663 Ectadion	705 Ectylotic
622 Ecquod	664 Ectatique	706 Ectypal
623 Ecrabouir	665 Ectatops	707 Ectype
624 Ecrache	666 Ectenes	708 Ectypique
625 Ecraigne	667 Ecthese	709 Ectyporum
626 Ecraïnier	668 Ecthesien	710 Ecuable
627 Ecrapette	669 Ecthlimme	711 Ecuacion
628 Ecrasable	670 Ecthlipse	712 Ecuanteur
629 Ecrasais	671 Ecthlipsis	713 Ecubier
630 Ecraser	672 Ecthyma	714 Ecueil
631 Ecraserais	673 Ecthymose	715 Ecuïage
632 Ecraseriez	674 Ecthymosis	716 Eculeo
633 Ecrasiez	675 Ectilotici	717 Ecumais
634 Ecrasure	676 Ectimosi	718 Ecumant
635 Ecremaison	677 Ectipo	719 Ecumenical
636 Ecremer	678 Ectobie	720 Ecumenico
637 Ecremillon	679 Ectoblast	721 Ecumeresse
638 Ecremoire	680 Ectocarpe	722 Ecumeront
639 Ecrevisse	681 Ectocyste	723 Ecumeux
640 Ecrhexis	682 Ectoderme	724 Ecumions
641 Ecriames	683 Ectogramma	725 Ecumoïre
642 Ecrieront	684 Ectolitro	726 Ecunemica
643 Ecrille	685 Ectometro	727 Ecunemicos
644 Ecrirons	686 Ectonstero	728 Ecuorea
645 Ecrise	687 Ectopage	729 Ecuoreos
646 Ecriteau	688 Ectopagia	730 Ecureuil
647 Ecritmo	689 Ectophyte	731 Ecusson
648 Ecritoire	690 Ectopia	732 Ecussonne

733	Ecvolorum	775	Edelmuth	817	Edetanos
734	Ecvolus	776	Edelopal	818	Edgar
735	Eczematous	777	Edelraut	819	Edgeless
736	Edacidade	778	Edelreis	820	Edgewise
737	Edacious	779	Edelrose	821	Edgythe
738	Edaciously	780	Edelschoen	822	Edharz
739	Edacissimo	781	Edelsinn	823	Edhemite
740	Edacitatis	782	Edelsinnig	824	Edibility
741	Edacite	783	Edelstahl	825	Edible
742	Edaphodont	784	Edelstolz	826	Edibleness
743	Eddaic	785	Edelthat	827	Edicaria
744	Eddas	786	Edelthier	828	Edicendum
745	Eddered	787	Edelvrouw	829	Edichio
746	Eddering	788	Edelweiss	830	Edicola
747	Eddoes	789	Edematico	831	Edictabam
748	Edealogia	790	Edematoso	832	Edictabis
749	Edeatros	791	Edematous	833	Edictalium
750	Edecan	792	Edemera	834	Edictamus
751	Edecanes	793	Edenique	835	Edictarem
752	Edecimamus	794	Edenisch	836	Edictavi
753	Edecimatum	795	Edenize	837	Edictione
754	Edecimavi	796	Edenizing	838	Edictionis
755	Edelaardig	797	Edenruine	839	Edictorum
756	Edeldame	798	Edental	840	Edicule
757	Edelerde	799	Edentalous	841	Ediderunt
758	Edelfest	800	Edentamus	842	Edidici
759	Edelfink	801	Edentation	843	Edidicimus
760	Edelfisch	802	Edento	844	Edidisti
761	Edelfrau	803	Edentula	845	Edifiant
762	Edelfuchs	804	Edentulus	846	Edificaban
763	Edelgarbe	805	Edeopalmo	847	Edificacao
764	Edelhengst	806	Edepoe	848	Edificada
765	Edelhof	807	Edera	849	Edificados
766	Edelknabe	808	Ederaceo	850	Edificao
767	Edelknecht	809	Ederaceus	851	Edifice
768	Edelkrebs	810	Ederato	852	Edificios
769	Edellehen	811	Ederoso	853	Edifiement
770	Edelmann	812	Edesio	854	Edifieras
771	Edelmarder	813	Edesseno	855	Edifieriez
772	Edelmass	814	Edessenus	856	Edifieront
773	Edelmoedig	815	Edesside	857	Edifiques
774	Edelmogend	816	Edetana	858	Edifizio

859 Edify	901 Edoctum	943 Educeret
860 Edifying	902 Edocuerunt	944 Educeretis
861 Edifyingly	903 Edocui	945 Educhiamo
862 Edikt	904 Edocuisti	946 Eductor
863 Edilberto	905 Edolandi	947 Edulcare
864 Edileship	906 Edolandos	948 Edulcorado
865 Edilicio	907 Edolandum	949 Edulcorant
866 Edilidade	908 Edolatorum	950 Edulcoreis
867 Edilita	909 Edolatum	951 Edulica
868 Edilitaire	910 Edolavisti	952 Edulous
869 Ediografia	911 Edolien	953 Edulis
870 Ediologia	912 Edomitas	954 Edumia
871 Ediosmo	913 Edomitavi	955 Eduquant
872 Ediotide	914 Edomiter	956 Eduquemos
873 Ediotomia	915 Edoner	957 Eduques
874 Edisaro	916 Edonio	958 Edurescis
875 Edisma	917 Edonismo	959 Edurorum
876 Edisseris	918 Edonorum	960 Edwardsie
877 Edisserto	919 Edormisco	961 Edwarsite
878 Editeur	920 Edossage	962 Edwig
879 Editicia	921 Edostome	963 Edyllium
880 Editioned	922 Edredon	964 Edzard
881 Editioning	923 Edredones	965 Eedbrekers
882 Editor	924 Edris	966 Eedbreuk
883 Editores	925 Edrisiden	967 Eedgespan
884 Editorial	926 Edrum	968 Eegaas
885 Editoribus	927 Educacao	969 Eekhakker
886 Editorship	928 Educadores	970 Eekhandel
887 Editress	929 Educados	971 Eekhoren
888 Editresses	930 Educaremus	972 Eelbuck
889 Edituate	931 Educate	973 Eelpot
890 Edituating	932 Educateur	974 Eelspear
891 Edixerimus	933 Educative	975 Eeltachtig
892 Edixi	934 Educatore	976 Eelterig
893 Ediximus	935 Educatrix	977 Eeltzweer
894 Edixissem	936 Educatum	978 Eenbladig
895 Edizione	937 Educaturi	979 Eenbloemig
896 Edmondie	938 Educatueros	980 Eendebout
897 Edmundo	939 Educaturum	981 Eendenei
898 Edoardo	940 Educavano	982 Eendenhok
899 Edocenter	941 Educavisti	983 Eendenkom
900 Edocephale	942 Educavit	984 Eendenkooi

985 Eendennest	8,000 Eenoogig	30,000 Eenzal
986 Eendenroer	9,000 Eenrijm	31,000 Eenzalums
987 Eender	10,000 Eenschalgig	32,000 Eenzarium
988 Eendeveder	11,000 Eensdeels	33,000 Eenzatu
989 Eendjes	12,000 Eensgezind	34,000 Eenzbacite
990 Eendracht	13,000 Eensklaps	35,000 Eenzbacon
991 Eendvogels	14,000 Eensnarig	36,000 Eenzbacpar
992 Eengrepig	15,000 Eenspan	37,000 Eenzbdaic
993 Eenhandig	16,000 Eenstemmig	38,000 Eenzbdas
994 Eenheid	17,000 Eenstijlig	39,000 Eenzbdered
995 Eenhelmig	18,000 Eenvakkig	40,000 Eenzbdoes
996 Eenhoekig	19,000 Eenvervig	41,000 Eenzbegan
997 Eenhoofdig	20,000 Eenvinnig	42,000 Eenzcatum
998 Eenhoorn	21,000 Eenvoetig	43,000 Eenzcole
999 Eenhoornig	22,000 Eenvoud	44,000 Eenzdake
1,000 Eenhuizig	23,000 Eenvoudig	45,000 Eenzdime
2,000 Eenigerlei	24,000 Eenwijvig	46,000 Eenzdurium
3,000 Eeniglijk	25,000 Eenzaam	47,000 Eenzeear
4,000 Eekennig	26,000 Eenzabing	48,000 Eenzeabat
5,000 Eenkleurig	27,000 Eenzabors	49,000 Eenzeatum
6,000 Eenlobbig	28,000 Eenzaceom	50,000 Eenzedite
7,000 Eenoog	29,000 Eenzadare	

Useful Sentences for Cabling for Parts of Locomotives

- Eenzelvig** . . At what price and how soon can you ship duplicate parts covered by code word ?
- Eenzijdig** . . How soon can you ship duplicate parts covered by code word ?
- Eeotomous** . . Please ship by express as soon as possible duplicate parts covered by code word
- Eeramdt** . . Please ship by express as soon as possible duplicate parts covered by code word for locomotive, construction number
- Eerbetoen** . . Please ship by freight as soon as possible duplicate parts covered by code word
- Eereblijk** . . Please ship by freight as soon as possible duplicate parts covered by code word for locomotive, construction number
- Eereboog** . . Please ship overland as soon as possible duplicate parts covered by code word
- Eeredegen** . . Please ship overland as soon as possible duplicate parts covered by code word for locomotive, construction number
- Eeredienst** . . Please ship by quickest freight route as soon as possible duplicate parts covered by code word
- Eeregraf** . . . Please ship by quickest freight route as soon as possible duplicate parts covered by code word for locomotive, construction number
- Eerekrans** . . Please ship by steamer as soon as possible duplicate parts covered by code word
- Eerekroon** . . Please ship by steamer as soon as possible duplicate parts covered by code word for locomotive, construction number
- Eeremantel** . . Please ship by sailing vessel as soon as possible duplicate parts covered by code word

Eereplaats . .	Please ship by sailing vessel as soon as possible duplicate parts covered by code word for locomotive, construction number
Eerepoort . .	Please ship by steamer as soon as possible duplicate parts to the value of \$
Eerepost . .	Please ship by steamer as soon as possible duplicate parts to the value of \$ for locomotive, construction number
Eereposten . .	Please ship by sailing vessel as soon as possible duplicate parts to the value of \$
Eereprijs . . .	Please ship by sailing vessel as soon as possible duplicate parts to the value of \$ for locomotive, construction number
Eeresabels . .	For right hand side of one locomotive, construction number
Eereschot . .	For right hand side of two locomotives, construction number
Eerestoel . .	For right hand side of three locomotives, construction number
Eeretempel . .	For right hand side of four locomotives, construction number
Eeretitels . .	For right hand side of five locomotives, construction number
Eeretomben . .	For left hand side of one locomotive, construction number
Eeretrapp . . .	For left hand side of two locomotives, construction number
Eerewacht . .	For left hand side of three locomotives, construction number
Eerewapen . .	For left hand side of four locomotives, construction number
Eerewijn . . .	For left hand side of five locomotives, construction number
Eerewoord . .	For one locomotive, construction number
Eergevoel . .	For two locomotives, construction number
Eergierig . .	For three locomotives, construction number
Eerlijk . . .	For four locomotives, construction number
Eerlijker . .	For five locomotives, construction number
Eerloozers . .	For six locomotives, construction number
Eermetaal . .	For seven locomotives, construction number
Eernamen . .	For eight locomotives, construction number
Eerpenning . .	For nine locomotives, construction number

Eerroof . . .	For ten locomotives, construction number
Eerroovend . .	Hold order ofuntil you receive further instructions.
Eershalve . .	Forward motion.
Eerstdaags . .	Backward motion.
Eertijds . . .	
Eervol	
Eervoller . . .	
Eerwaarde . .	
Eerwaardig . .	
Eerzamer . . .	
Eerzucht . . .	
Eerzuchtig . .	
Eesting	
Eestmout . . .	
Eetbak	
Eethuis	
Eethuizen . . .	
Eetion	
Eetionem	
Eetkamers . . .	
Eetlepels . . .	
Eetlust	
Eetmalen	
Eetplaats . . .	
Eetregel	
Eetsters	
Eettafel	
Eetwaar	
Eetzaal	
Eeuwen	
Eeuwenoud . . .	
Eeuwfeest	
Eeuwjaar	
Eeuwspel	
Eeuwzang	
Eeuwzangen . .	
Efantel	
Efaufile	
Efectuado	
Efectuamos . . .	
Efectuaron . . .	

Efectuases . .
Efectueis . .
Efedra . . .
Efemerides .
Efemerie . .
Efesias . . .
Efesio
Efestite . . .
Efetico . . .
Effable . . .
Effacable . .
Effacage . . .
Effacais . . .
Effacasses . .
Effacerais . .
Effaceriez . .
Effacerons . .
Effacest . . .
Effacing . . .
Effacons . . .
Effaecata . .
Effaecatus . .
Effaner . . .
Effanures . .
Effarcimus .
Effarcio . . .
Effarciunt . .
Effarement .
Effarvatte . .
Effatio
Effatione . .
Effatorum . .
Effauce . . .
Effaumer . . .
Effeccao . . .
Effecerim . .
Effecissem . .
Effectible . .
Effectif . . .
Effectione . .
Effectivo . . .
Effectivus . .

Effectless . . .
Effectrix . . .
Effectuais . . .
Effectuar . . .
Effectuose . . .
Effecundo . . .
Effeiance . . .
Efeito
Efeitoioso . . .
Effelure . . .
Effeminar . . .
Effeminava . . .
Effeminize . . .
Effendi . . .
Effenende . . .
Effenheid . . .
Effening . . .
Efferascis . . .
Efferasco . . .
Efferatio . . .
Efferatus . . .
Efferous . . .
Efferimus . . .
Efferisti . . .
Effervens . . .
Efferveo . . .
Effervesce . . .
Effestria . . .
Effestuer . . .
Effete
Effettore . . .
Effettrice . . .
Effettuato . . .
Effettuavi . . .
Effeuiller . . .
Efezione. . . .
Efficacia . . .
Efficaz
Efficiency . . .
Efficient . . .
Efficienza . . .
Efficta

Effictorum . .
Effictum . . .
Effierced . . .
Effiercing . .
Effigiado . . .
Effigiar . . .
Effigiassi . .
Effigiava . . .
Effigie
Effigierai . .
Effiloche . . .
Effiloquer . .
Effimero . . .
Effindere . . .
Efflagitas . .
Efflagito . . .
Efflammans . .
Efflanque . . .
Efflation . . .
Efflatos
Effleuraïs . .
Effleure
Efflevisti . . .
Efflictim . . .
Effloreo
Effloremus . .
Effloresce . . .
Efflorui
Efflower
Effluencia . . .
Effluente . . .
Effluescis . . .
Effluvial . . .
Effluvio
Effluvioso . .
Effluxed
Effluxing . . .
Effluxorum . .
Effocare
Effoderunt . .
Effodimus . . .
Effodisti

Effoedis . . .
Effoedo . . .
Effondrait . .
Effondront . .
Effor
Efforcais . . .
Efforcant . .
Efforcing . .
Efforcions . .
Efforeria . . .
Efformed . .
Efformier . .
Effortless . .
Effossioni . .
Effossum . .

Groups of Duplicate Parts with Code Words

[In some cases it will be more convenient to order parts by using these group words; in others by a reference to the plates. To find part needed, see index at the back of the book.]

Effouage . . . I	Boiler with Tubés, Double Cone, Dry Pipe, Throttle work complete, including Stuffing Box and Gland, Dome Cap and Safety Valves, Smokebox Front and Door, Fire Door with Liner and Frame and Cleaning Plugs, tested and primed.
Effoueil . . . I	Boiler with Tubes and Cleaning Plugs only, tested and primed.
Effractor . . . I	Firebox.
Effracture . . . I	Set Boiler Tubes.
Effrange . . . I	Set Boiler Tube Ferrules.
Effrayable . . . I	Double Cone.
Effrayer . . . I	Set Steam Pipes.
Effrayeras . . . I	Throttle Valve, Box, Pipe, Elbow, Crank, and Rod.
Effrayiez . . . I	Smokebox Front and Door.
Effrayons . . . I	Fire Door with Frame and Liner.
Effreement . . . I	Set Cleaning Plugs.
Effrenatio . . . I	Set Fusible Plugs.
Effrenatus . . . I	Set Boiler Lagging.
Effrenibus . . . I	Set Boiler Jacket.
Effrenis . . . I	Set Boiler Jacket Bands.
Effricare . . . I	Set Safety Valves, complete.
Effricatum . . . I	Pair Cylinders with Heads, Covers, Chests, Caps, Casings, Glands, Valves, Yokes and Pistons, painted and varnished.
Effrico . . . I	Pair Finished Cylinders, bolted together, without any fittings.
Effrique . . . I	Set Front Cylinder Heads.
Effriter . . . I	Set Back Cylinder Heads.
Effrixisti . . . I	Set Front Cylinder Covers.
Effroisser . . . I	Set Back Cylinder Covers.
Effruitant . . . I	Set Cylinder Glands and Bottom Rings.

- Effrutico . . . I Set Metallic Packing complete, for Piston Rods and Valve Stems.
- Effugio . . . I Set Composition Rings for Metallic Packing of Piston Rods and Valve Stems.
- Effugisti . . . I Set Cylinder Casings.
- Effugitos . . . I Set Steam Chests.
- Effugiunt . . . I Set Steam Chest Caps or Lids.
- Effulcrate . . . I Set Steam Chest Glands and Bottom Rings.
- Effulge . . . I Set Steam Chest Casings.
- Effulgence . . . I Set Steam Chest Casing Covers.
- Effulgent . . . I Set Steam Chest Valves.
- Effulgetis . . . I Set Steam Chest Valve Yokes.
- Effulsio . . . I Set Steam Chest Relief Valves.
- Effulsioni . . . I Set Pistons with Rods and Packing.
- Effultorum . . . I Set Piston Rods.
- Effultus . . . I Set Piston Packing.
- Effumable . . . I Pair Cylinders with Heads, Covers, Casings, Valves, Stems, Pistons, Metallic Piston Rod and Valve Stem Packing, complete (Vauclain Compound System).
- Effumant. . . I Pair Finished Cylinders with Bushings, bolted together, but without other fittings (Vauclain Compound System).
- Effumigare. . . I Set Front Cylinder Heads, High Pressure (Vauclain Compound System).
- Effuming. . . I Set Back Cylinder Heads, High Pressure (Vauclain Compound System).
- Effundica . . . I Set Front Cylinder Head Casing Covers, High Pressure (Vauclain Compound System).
- Effundir . . . I Set Back Cylinder Head Casing Covers, High Pressure (Vauclain Compound System).
- Effundo . . . I Set Front Cylinder Heads, Low Pressure (Vauclain Compound System).
- Effusion . . . I Set Back Cylinder Heads, Low Pressure (Vauclain Compound System).
- Effusive . . . I Set Front Cylinder Head Casing Covers, Low Pressure (Vauclain Compound System).
- Effusively . . . I Set Back Cylinder Head Casing Covers, Low Pressure (Vauclain Compound System).
- Effusoris . . . I Set Front Valve Chamber Heads (Vauclain Compound System).

- Effusorum . . . 1 Set Back Valve Chamber Heads (Vauclain Compound System).
- Effuticius . . . 1 Set Front Valve Chamber Head Casing Covers (Vauclain Compound System).
- Effutile . . . 1 Set Back Valve Chamber Head Casing Covers (Vauclain Compound System).
- Effutillis . . . 1 Set Valve Chamber Bushings (Vauclain Compound System.)
- Effutilium . . . 1 Set Main Piston Valves with Rings (Vauclain Compound System).
- Efialte . . . 1 Set Main Piston Valves with Rings and Stems (Vauclain Compound System).
- Eficiencia . . . 1 Set Main Piston Valve Rings (Vauclain Compound System).
- Efigies . . . 1 Set Pistons with Rods and Packing, High Pressure (Vauclain Compound System).
- Eflagelle . . . 1 Set Pistons with Rods and Packing, Low Pressure (Vauclain Compound System).
- Efourceau . . . 1 Set Piston Packing Rings, High Pressure (Vauclain Compound System).
- Efraimo . . . 1 Set Piston Packing Rings, Low Pressure (Vauclain Compound System.)
- Efusal . . . 1 Set Piston Rods (Vauclain Compound System).
- Egagre . . . 2 Starting Valves (Vauclain Compound System).
- Egagropilo . . . 4 Cylinder Cocks (Vauclain Compound System).
- Egailler . . . 1 Set Cylinder Relief Valves (Vauclain Compound System).
- Egalement . . . 1 Set Frames without Fittings.
- Egalisage . . . 1 Set Frame Front Rails.
- Egaliser . . . 1 Set Frame Pedestal Caps.
- Egaliseras . . . 1 Set Pedestal Wedges.
- Egalisons . . . 1 Set Pedestal Wedge Bolts.
- Egalitaire . . . 1 Set Pedestal Gibs.
- Egalite . . . 1 Set Driving Wheels complete, on Axles with Eccentrics, Eccentric Straps, and Boxes, painted and varnished.
- Egancette . . . 1 Set Driving Tires.
- Egarerais . . . 1 Set Wrist Pins.
- Egareriez . . . 1 Set Driving Axles.
- Egareront . . . 1 Set Eccentrics.
- Egariez . . . 1 Set Eccentric Straps.
- Egarons . . . 1 Set Guides with Filling Pieces.

Egarrotte . . .	1	Set Crossheads.
Egauler . . .	1	Set Crosshead Gibs.
Egayantes . . .	1	Set Crosshead Filling Pieces.
Egayasses . . .	1	Set Crosshead Pins.
Egayer . . .	1	Set Rods complete, except Oil Cups.
Egayeras . . .	1	Set Rod Brasses.
Egayions . . .	1	Set Rod Straps.
Egberto . . .	1	Set Rod Keys.
Egdauama . . .	1	Set Rod Straps with Brasses, Keys, Bolts and Set Screws.
Egeenne . . .	1	Set Links complete, with Blocks, Lifters, Eccentric Rods and all Pins.
Egeirino . . .	1	Reverse Shaft.
Egelamus . . .	1	Set Reverse Shaft Bearings.
Egelantier . . .	1	Set Rock Shafts.
Egelbeere . . .	1	Set Rocker Boxes.
Egelgras . . .	1	Set Valve Rods.
Egelidamus . . .	1	Counterbalance Spring.
Egelidas . . .	1	Pump complete.
Egelkruid . . .	1	Pump Plunger.
Egelochus . . .	1	Pump Feed Cock.
Egentium . . .	1	Pump Check complete.
Egenulorum . . .	1	Complete Set of Springs.
Egerane . . .	1	Set Driving Springs.
Egermage . . .	1	Set Driving Spring Links.
Egersimon . . .	1	Set Engine Truck Springs.
Egesaretus . . .	1	Set Tender Springs.
Egesippe . . .	1	Forward Equalizing Beam.
Egestas . . .	1	Forward Equalizing Beam Fulcrum.
Egestione . . .	1	Set Equalizing Beams.
Egestionis . . .	1	Set Equalizing Beam Fulcrums.
Egestorum . . .	1	Bell with Clapper and Tongue.
Egestosi . . .	1	Bell with Clapper and Tongue, Frame, Yoke and Crank.
Egestosus . . .	1	Sand Box complete.
Egestuum . . .	1	Smoke Stack complete with Base.
Eggaree . . .	1	Smoke Stack Base complete.
Eggebalken . . .	1	Smoke Stack Cone.
Eggehaken . . .	1	Smoke Stack Netting.
Eggement . . .	1	Set Grate Bars.
Eggen . . .	1	Set Grate Frames or Holders.
Eggerigst . . .	1	Set Rocking Grates, with all Fixtures.

Eggerling . . .	1	Set Engine Truck Boxes with Brasses and Cellars.
Eggiger . . .	1	Set Engine Truck Box Brasses.
Eggigheid . . .	1	Set Engine Truck Box Cellars.
Eghiazar . . .	1	Set Driving Boxes with Brasses and Cellars.
Egialus . . .	1	Set Driving Box Brasses.
Egidarmato . . .	1	Set Driving Box Cellars.
Egidio . . .	1	Set Tender Boxes with Lids, Wedges and Brasses.
Egifila . . .	1	Set Tender Boxes with Lids.
Egignere . . .	1	Set Tender Box Wedges.
Egilopical . . .	1	Set Tender Box Brasses.
Eginetique . . .	1	Engine Truck complete, with Wheels, Boxes, etc., painted and varnished.
Eginopside . . .	1	Engine Truck complete, except Wheels and Boxes.
Egiochus . . .	1	Engine Truck Center Pin.
Egipciana . . .	1	Engine Truck Swing Bolster.
Egipcios . . .	1	Engine Truck Frame.
Egipiro . . .	2	Engine Truck Wheels without Axles, bored.
Egiptologo . . .	1	Pair Engine Truck Wheels on Axles, painted and varnished.
Egirine . . .	1	Pilot.
Egissent . . .	1	Pilot Bull Nose.
Egiziache . . .	1	Pilot Draw Bar.
Egiziaco . . .	1	Engine Front Draw Casting.
Eglecopala . . .	1	Water Gauge, complete.
Egloga . . .	12	Water Gauge Glasses.
Eglogiste . . .	1	Water Gauge Lamp.
Egloguista . . .	1	Injector.
Eglon . . .	1	Injector Steam Valve.
Egmond . . .	1	Injector Feed Cock.
Egnatia . . .	1	Injector Check.
Egnatius . . .	1	Steam Gauge.
Egoarico . . .	1	Steam Gauge Stand.
Egoasinha . . .	1	Steam Gauge Lamp.
Egobole . . .	12	Steam Gauge Lamp Globes.
Egobuer . . .	1	Steam Gauge Lamp Stand.
Egofonia . . .	1	Blower Valve.
Egoger . . .	1	Heater Valve.
Egohine . . .	1	Steam Brake Valve for Engineer.
Egoical . . .	1	Steam Brake Stop Valve.
Egoismar . . .	1	Blow-off Cock.
Egoismo . . .	1	Set Gauge Cocks.
Egoistical . . .	1	Set Cylinder Cocks.

Egoistique . . .	1	Sight Feed Cylinder Lubricator.
Egoity	1	Set Cab Cylinder Oilers, B. L. W. Style.
Egoletro . . .	1	Set Condensing Steam Chest Oil Cups.
Egologie . . .	1	Set Rod Oil Cups.
Egologique . .	1	Set Guide Oil Cups.
Egomét	1	Set Rock Shaft Oil Cups.
Egomiste . . .	1	Set Eccentric Strap Oil Cups.
Egophone . . .	1	Whistle.
Egopodio . . .	1	Headlight.
Egopogono . .	1	Throttle Lever complete, with Quadrant, Latch, Link, Stud, Handle and Spring.
Egopríco . . .	1	Reverse Lever complete.
Egoprosope . .	1	Reverse Lever Rod, or Reach Rod.
Egorgement . .	1	Set Cab Brackets.
Egorgeoir . . .	1	Set Cab Bracket Plates.
Egorgeront . .	1	Foot Plate.
Egorgille . . .	1	Tender Wedge.
Egosiller . . .	1	Tender Wedge Box.
Egotheism . . .	1	Engine Back Draw Bar.
Egothele . . .	1	Exhaust Nozzle and Thimbles.
Egotism	1	Set Exhaust Nozzle Thimbles.
Egotistic . . .	1	Set Smokebox Netting.
Egotize	1	Spark Ejector.
Egotizing . . .	1	Spark Ejector Valve.
Egout	1	Set Smoke Box Cleaning Holes and Caps.
Egoutier	1	Set Driving Brake Shoes.
Egouttage . . .	1	Set Driving Brake Heads.
Egraffigne . .	1	Set Brake Cylinders complete, with Pistons and Rods.
Egrageure . . .	1	Set Driving Brake Cams.
Egrainage . . .	1	Tank with Funnel and Lid, Valves, Lugs and Han- dles, painted and varnished.
Egrainoir . . .	1	Tank Funnel and Lid.
Egramente . . .	1	Tank Cock.
Egraminer . . .	1	Tender, complete on Wheels, painted and varnished.
Egrappage . . .	1	Tender Chafing Casting.
Egrapper	1	Tender Front Draw Casting.
Egratigner . . .	1	Tender Back Draw Casting.
Egravoir	1	Set Tender Frame Center Pins.
Egregiat	1	Set Tender Pedestals.
Egregiorum . .	1	Set Tender Trucks complete, with Wheels, painted and varnished.

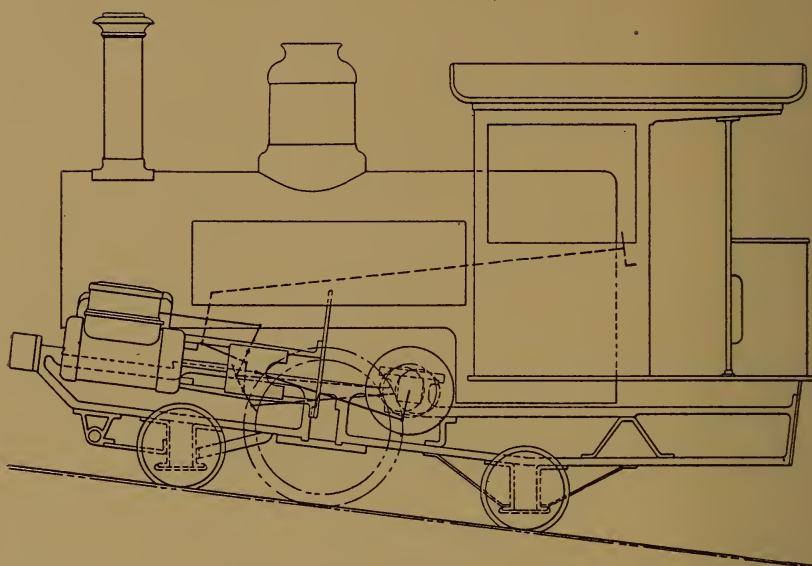
Egregious . . .	1	Tender Truck complete, with Wheels, painted and varnished.
Egregores . . .	1	Set Tender Trucks complete, without Wheels and Boxes.
Egrenement . . .	1	Tender Truck complete, without Wheels and Boxes.
Egressao . . .	1	Set Tender Truck Center Plates.
Egressed . . .	1	Set Tender Wheels on Axles, painted and varnished.
Egressing . . .	1	Pair Tender Wheels on Axle, painted and varnished.
Egribos . . .	1	Set Tender Wheels without Axles.
Egrillard . . .	1	Set Tender Brake Shoes.
Egriot . . .	1	Set Tender Brake Heads.
Egrisage . . .	1	Cab.
Egritude . . .		
Egrotant . . .		
Egsmeden . . .		
Egsmederij . . .		
Egsmid . . .		
Egtand . . .		
Egtanden . . .		
Egualendo . . .		
Egualezza . . .		
Egualimmo . . .		
Egualirai . . .		
Egualisco . . .		
Egualissi . . .		
Egualito . . .		
Egueille . . .		
Eguerunt . . .		
Eguilles . . .		
Eguimus . . .		
Eguisier . . .		
Eguisti . . .		
Egularum . . .		
Egurgito . . .		
Egypciaco . . .		
Egypius . . .		
Egyptiaque . . .		
Egyptien . . .		
Egyptology . . .		
Ehamote . . .		
Ehebett . . .		
Ehebruch . . .		

Ehebund . . .
Ehefrau . . .
Ehegatte . . .
Ehegeld . . .
Ehegemahl . . .
Ehegenosse . . .
Ehegericht . . .
Ehegespons . . .
Ehegestern . . .
Ehehaelfte . . .
Ehejoch . . .
Eheklage . . .
Eheleben. . . .
Eheleute
Eheliebe
Ehelos
Ehemals
Ehemann
Eheordnung . . .
Ehepaar
Ehepfand
Eherecht. . . .
Ehering
Eheringen
Ehern
Eheschatz
Eheschmied
Eheschuld
Ehesegen
Ehestifter
Ehestunde
Ehevater. . . .
Ehevogt
Eheweib
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Ehodum
Ehontement
Ehoupper
Ehrbarer. . . .
Ehrenamt
Ehrenbahn. . . .
Ehrenbett

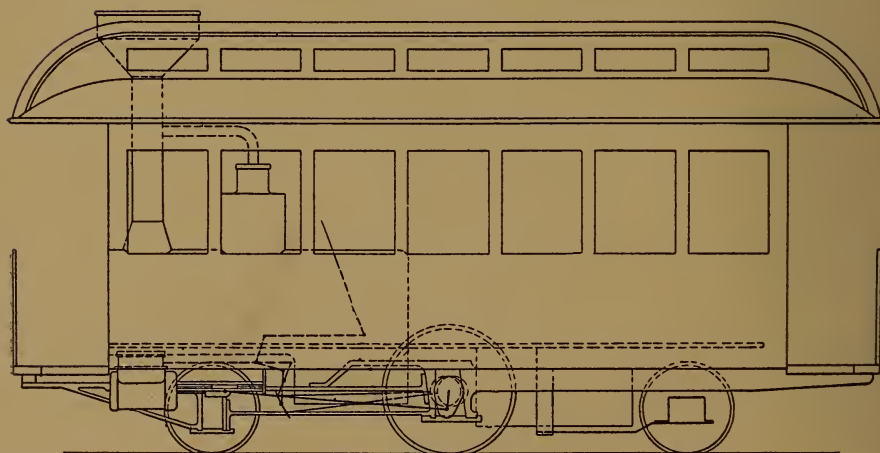
Ehrenbild . .
Ehrenbogen .
Ehrengabe . .
Ehrengift . .
Ehrengrab . .
Ehrengruss .
Ehrenhaft . .
Ehrenkampf .
Ehrenkerze .
Ehrenkette . .
Ehrenkranz .
Ehrenkreuz .
Ehrenkrone .
Ehrenlied . .
Ehrenlohn . .
Ehrenluege .
Ehrenmahl .
Ehrenmann .
Ehrenmusik .
Ehrenpaar . .
Ehrenplatz . .
Ehrenpreis . .
Ehrenpunkt .
Ehrenrauch .
Ehrenrecht .
Ehrenreim . .
Ehrenrock . .

Types of Locomotives

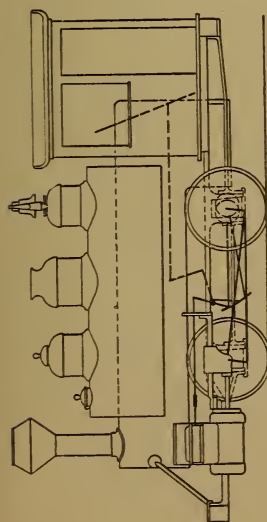
IN order to aid in understanding the class designations more readily, the different types of engines manufactured at these Works, with the class designations of each type, and the kind of service for which they are specially designed or adapted, are shown by line illustrations, in the following pages.



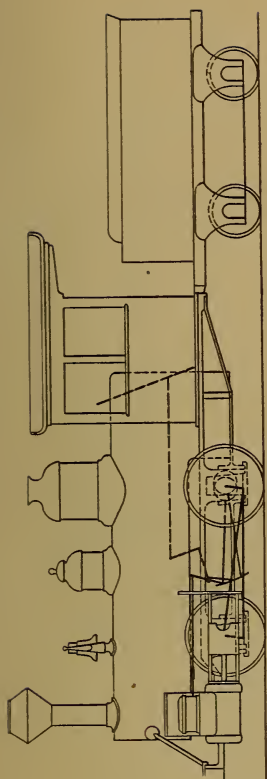
5 A (RACK RAIL TYPE)
MOUNTAIN SERVICE



6 B
INSPECTION SERVICE

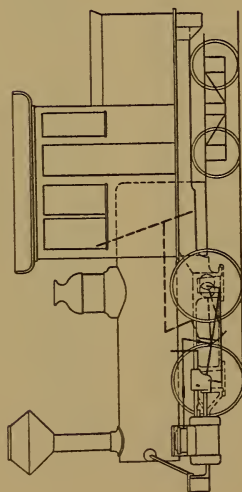


4 C TANK ON BOILER

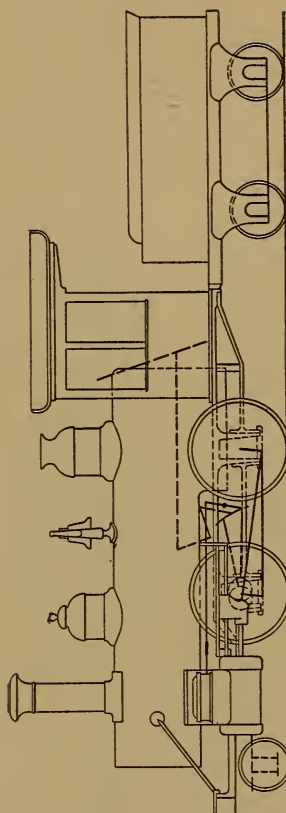


4 C WITH TENDER

SWITCHING SERVICE

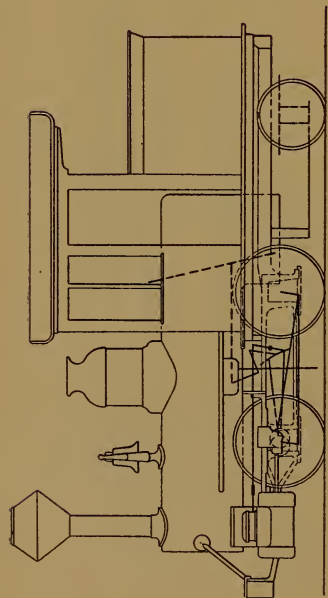


8 1/2 C TANK BACK

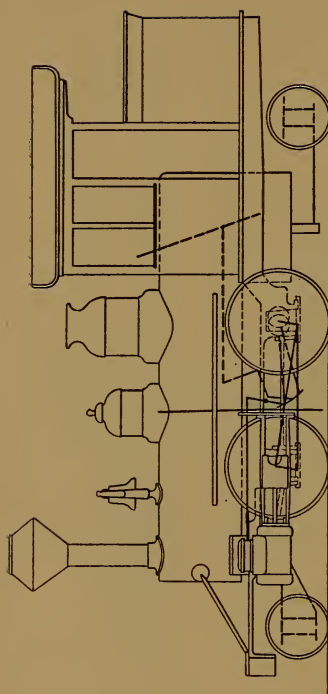


6 C WITH TENDER

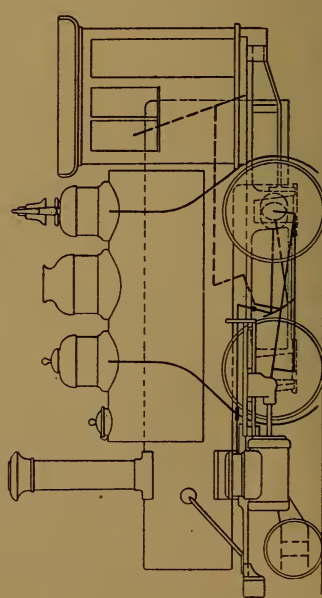
SWITCHING AND LOCAL SERVICE

6 $\frac{1}{3}$ C TANK BACK

SWITCHING AND LOCAL SERVICE

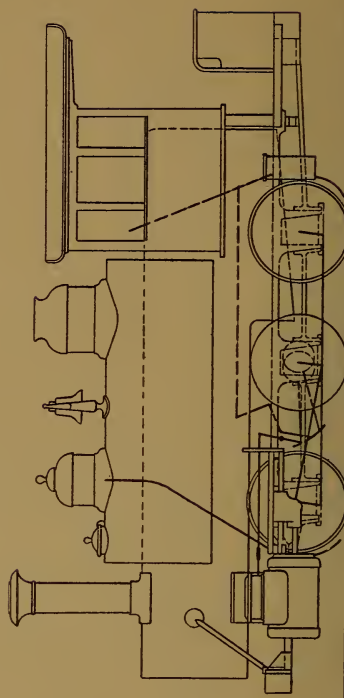
8 $\frac{1}{4}$ C TANK BACK

SWITCHING AND LOCAL PASSENGER SERVICE



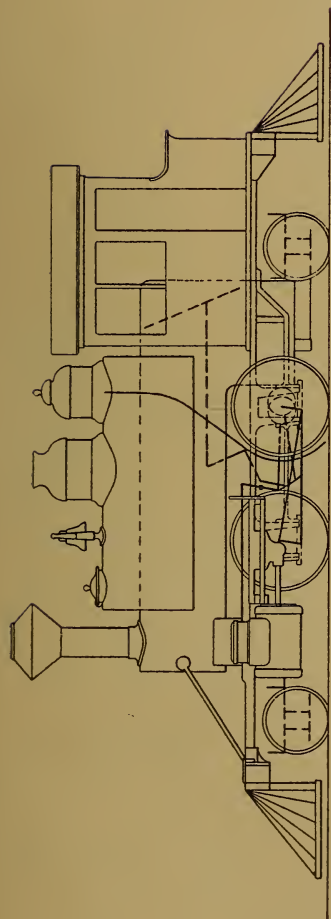
6 C TANK ON BOILER

SWITCHING AND LOCAL SERVICE

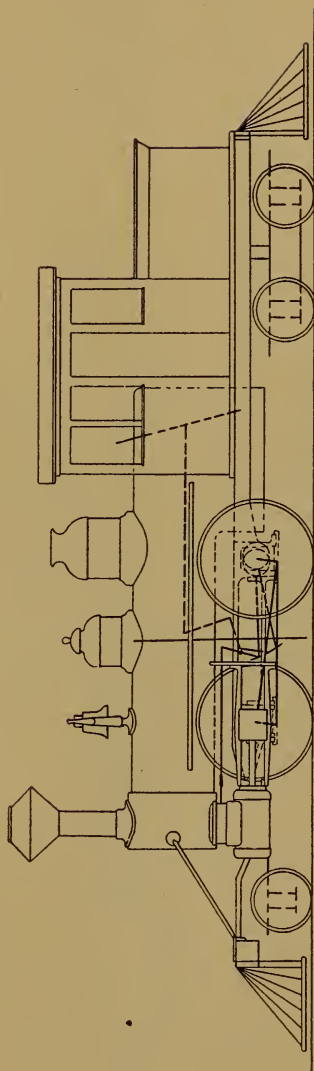


6 D TANK ON BOILER

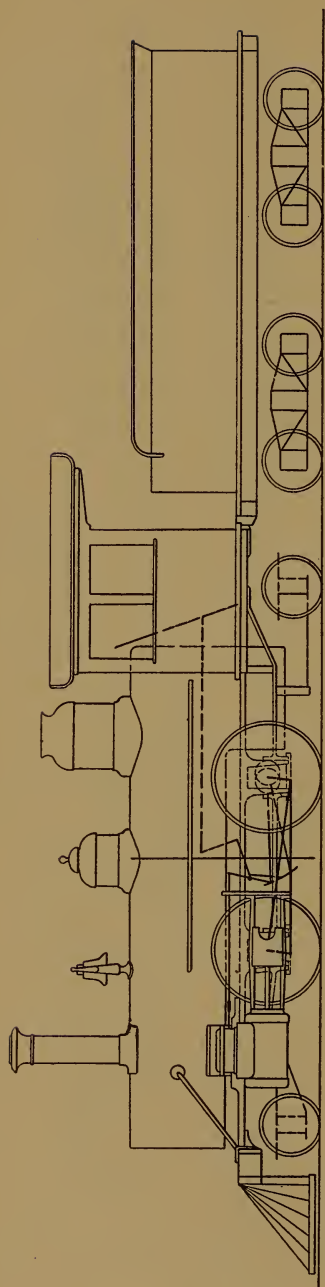
HEAVY SWITCHING



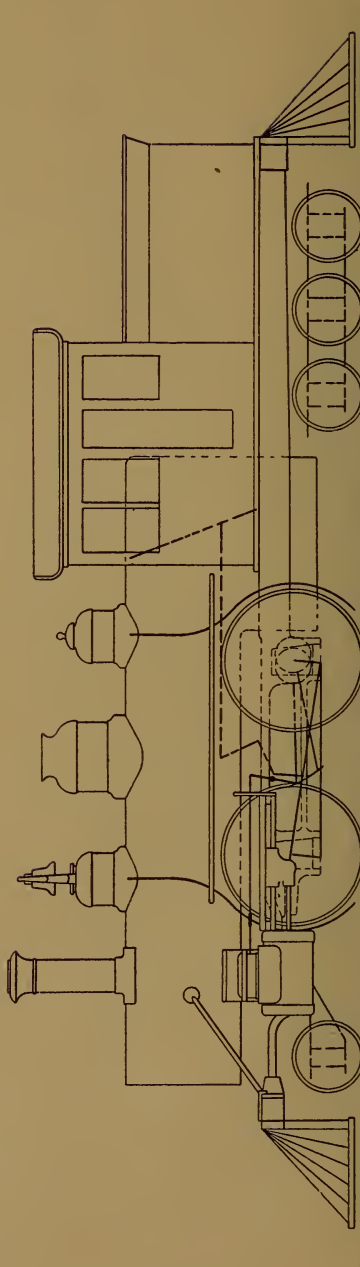
8 1/4 C TANK ON BOILER
LOCAL PASSENGER SERVICE



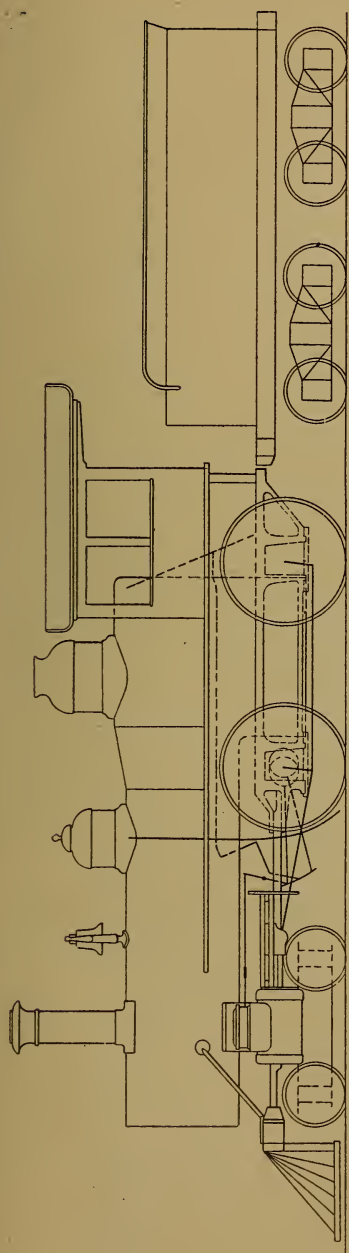
10 1/4 C TANK BACK
LOCAL PASSENGER SERVICE



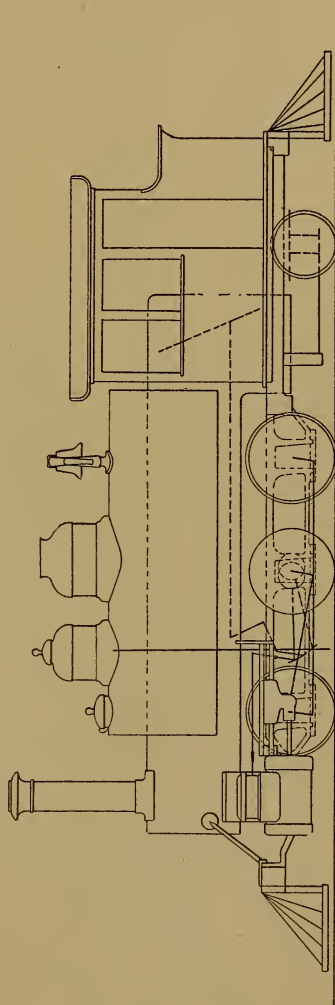
8 $\frac{1}{4}$ C WITH TENDER
EXPRESS PASSENGER SERVICE



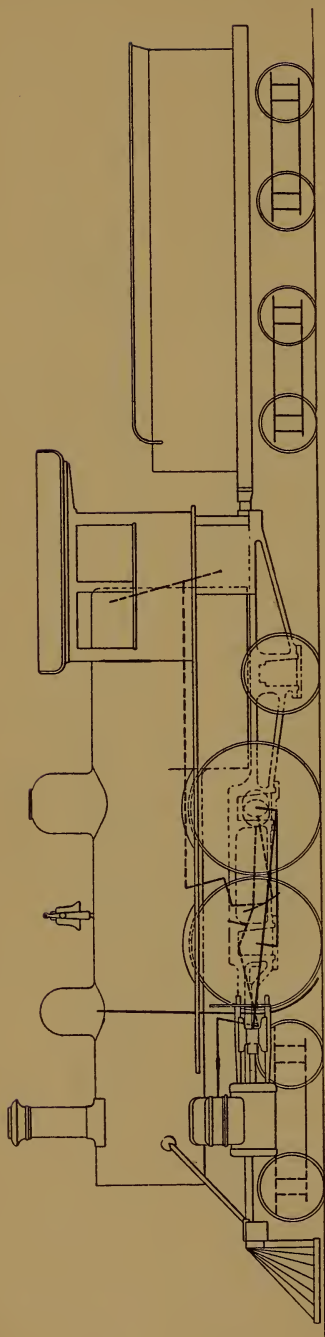
12 $\frac{1}{4}$ C TANK BACK
LOCAL PASSENGER SERVICE



8 C AMERICAN TYPE
EXPRESS PASSENGER SERVICE

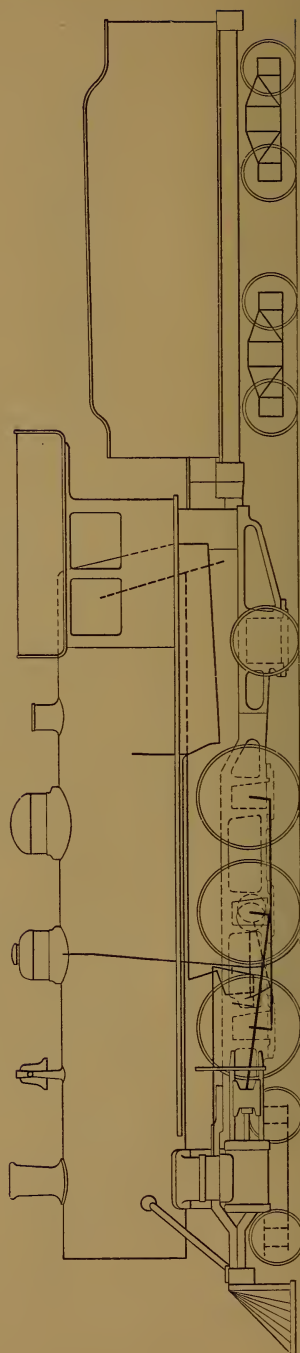


8 1/2 D TANK ON BOILER
HEAVY SWITCHING AND LOCAL FREIGHT SERVICE



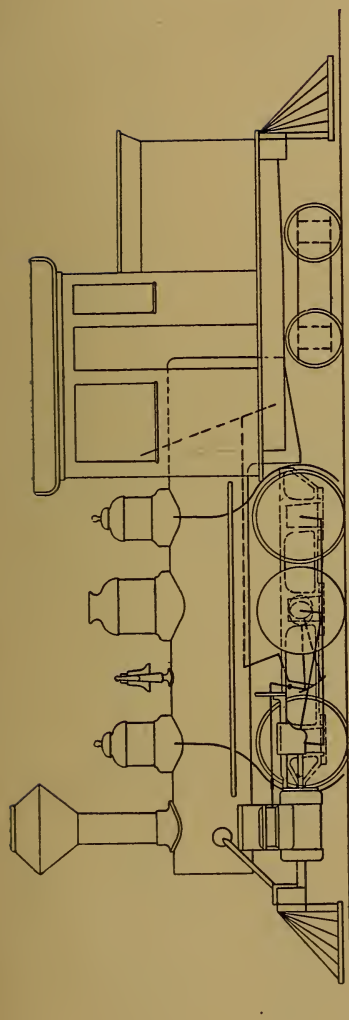
10 1/4 C (ATLANTIC TYPE)

HIGH SPEED PASSENGER SERVICE



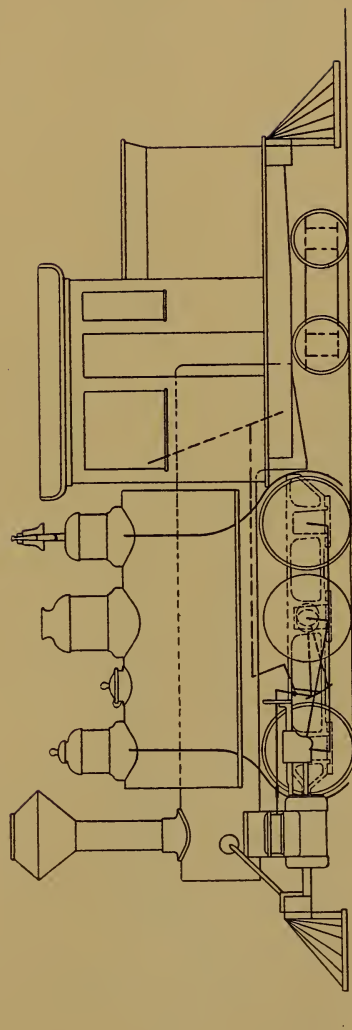
12 1/4 D (PACIFIC TYPE)

HEAVY PASSENGER SERVICE



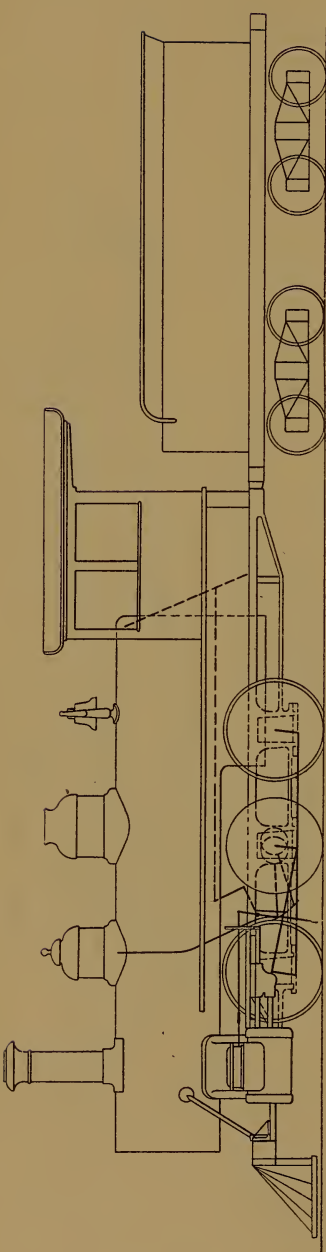
10 $\frac{1}{3}$ D TANK BACK

HEAVY SWITCHING AND LOCAL FREIGHT SERVICE

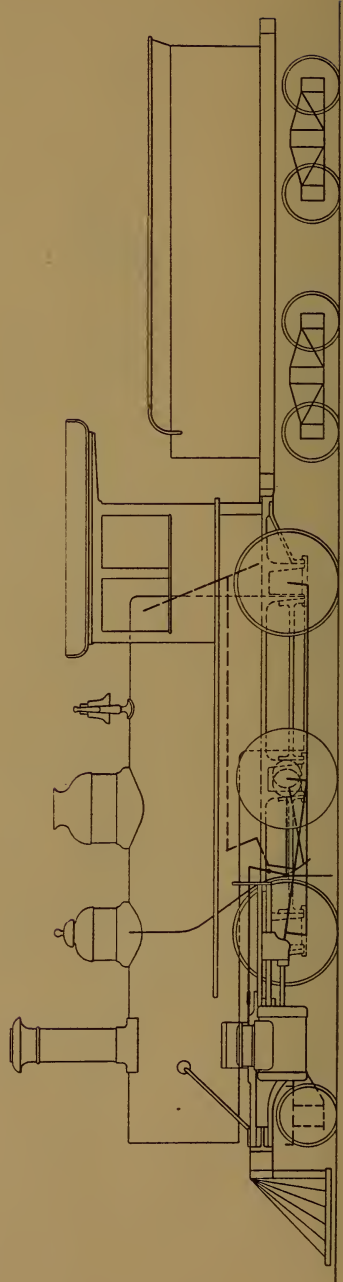


10 $\frac{1}{3}$ D TANK BACK AND ON BOILER

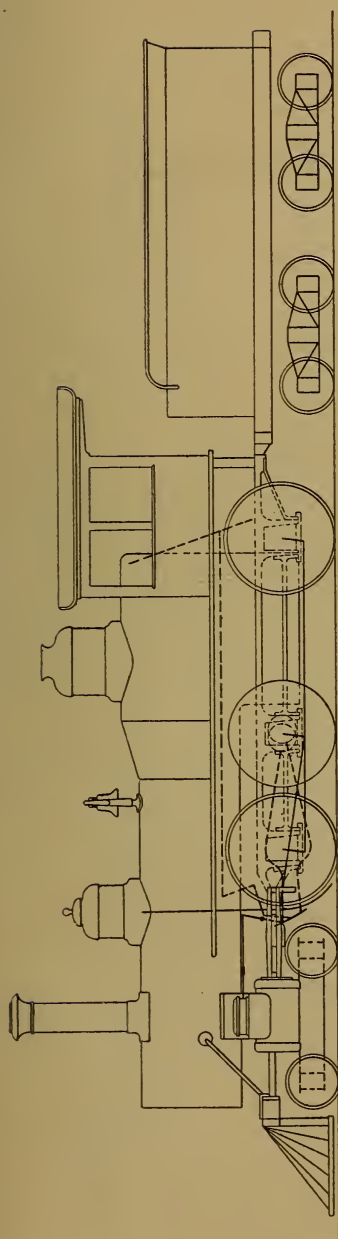
HEAVY SWITCHING AND LOCAL FREIGHT SERVICE



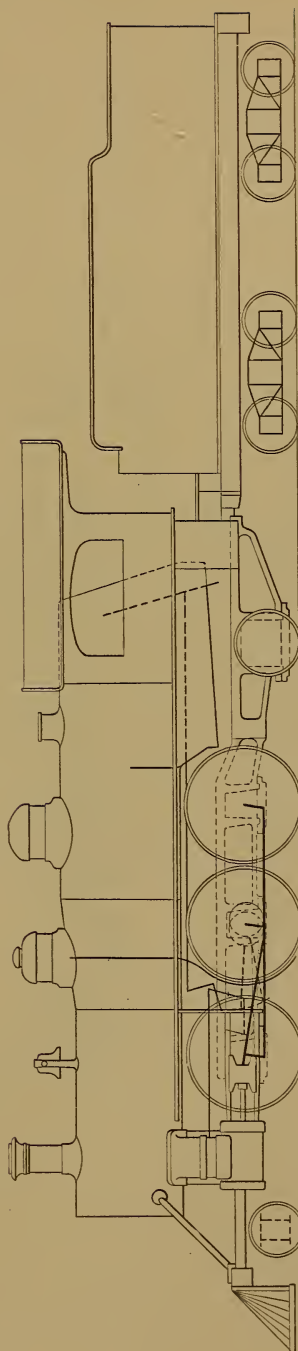
6 D WITH TENDER
HEAVY SWITCHING SERVICE



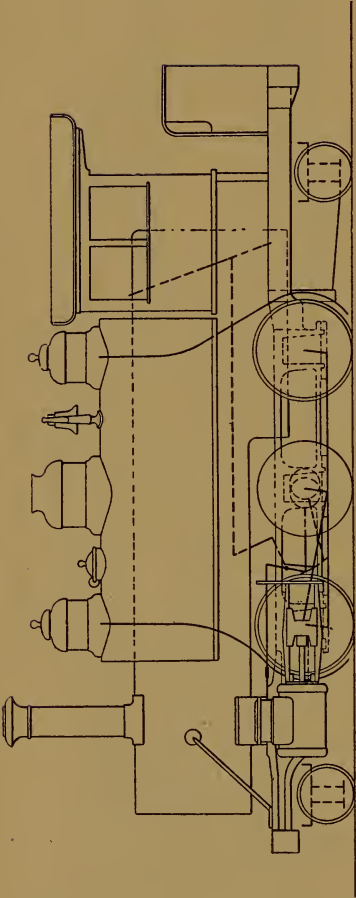
8 D MOGUL
FREIGHT SERVICE



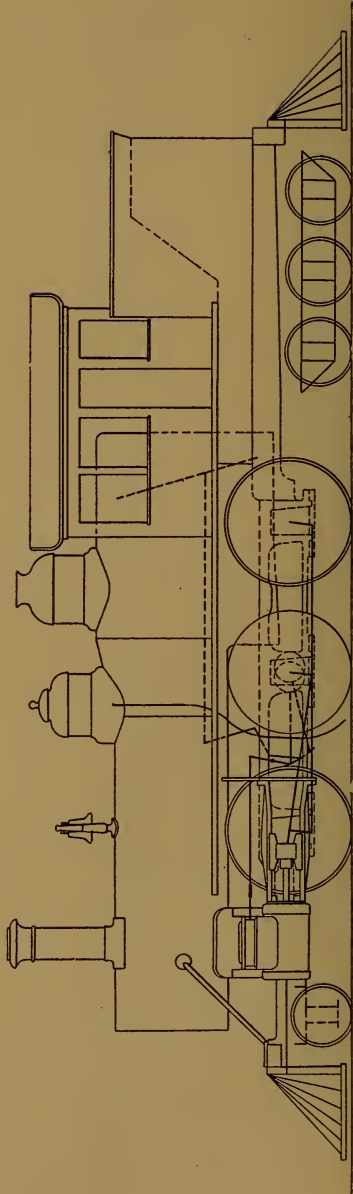
10 D TEN WHEELER
FAST FREIGHT AND PASSENGER SERVICE



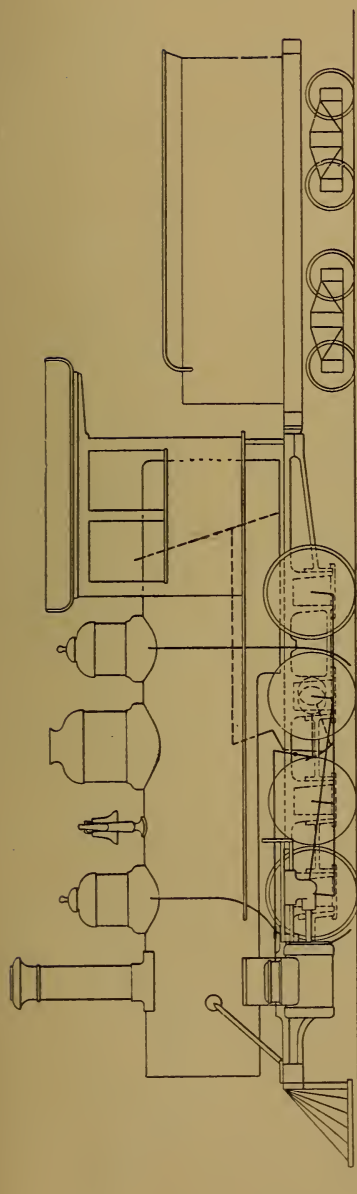
10 1/4 D PRAIRIE TYPE
PASSENGER AND FREIGHT SERVICE



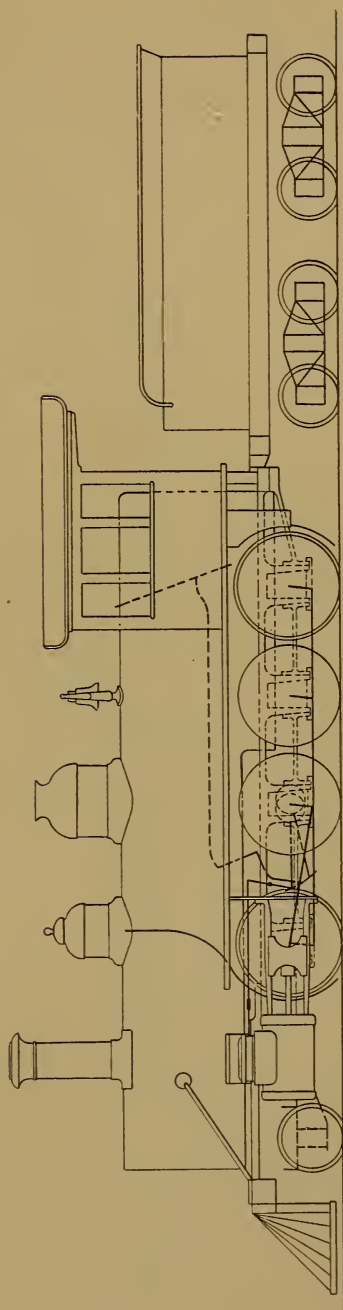
10 1/4 D TANK ON BOILER
HEAVY SWITCHING SERVICE



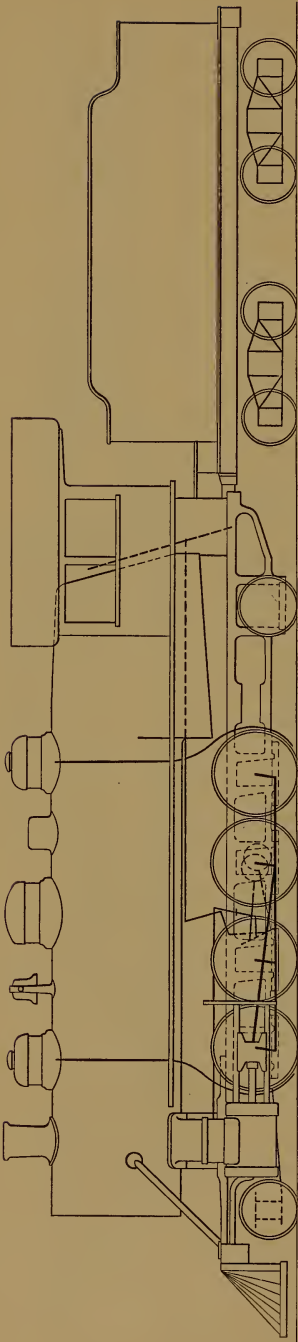
14 1/4 D TANK BACK
LOCAL PASSENGER SERVICE



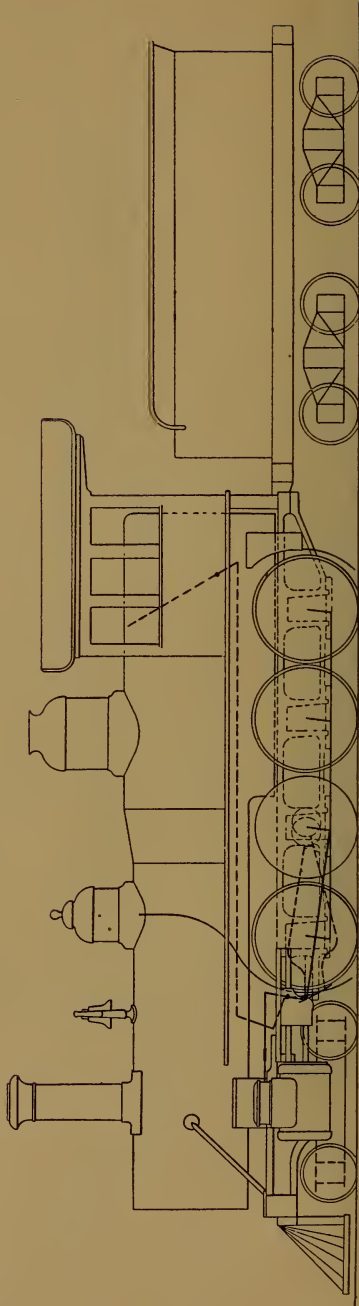
8 E
HEAVY FREIGHT SERVICE



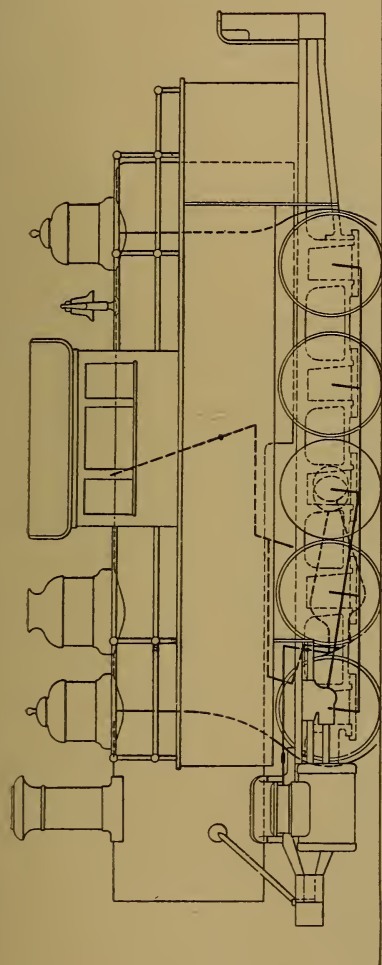
10 E CONSOLIDATION
HEAVY FREIGHT SERVICE



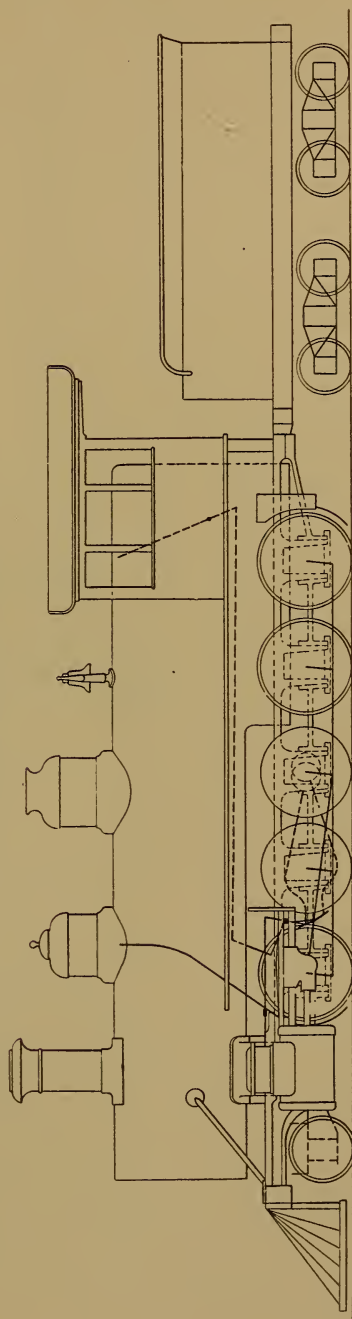
12 1/4 E MIKADO TYPE
HEAVY FREIGHT SERVICE



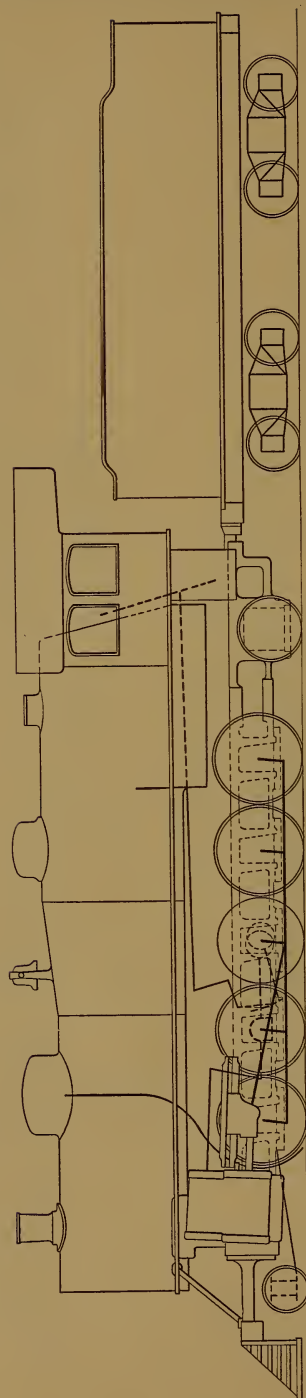
12 E
HEAVY FREIGHT SERVICE



10 F TANK ON BOILER
HEAVY SWITCHING SERVICE



12 F DECAPOD
HEAVY FREIGHT SERVICE



14 1/2 F SANTA FE TYPE
HEAVY FREIGHT SERVICE

Illustrated Plates

CROWN BAR TYPE

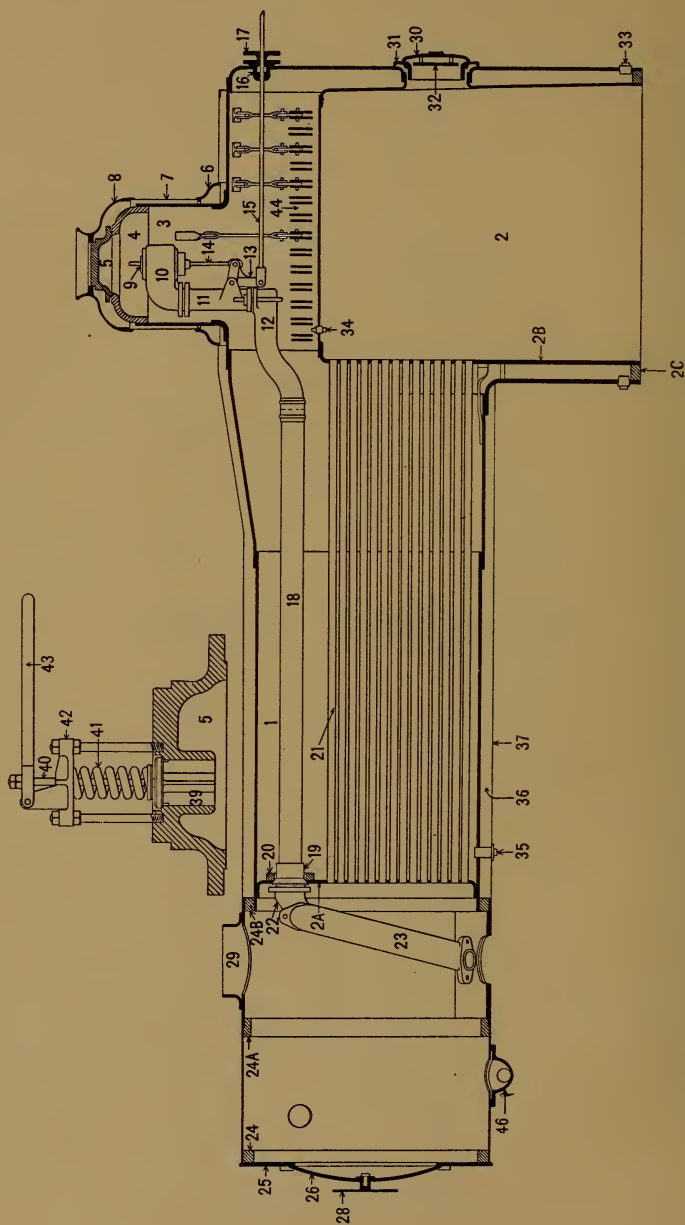
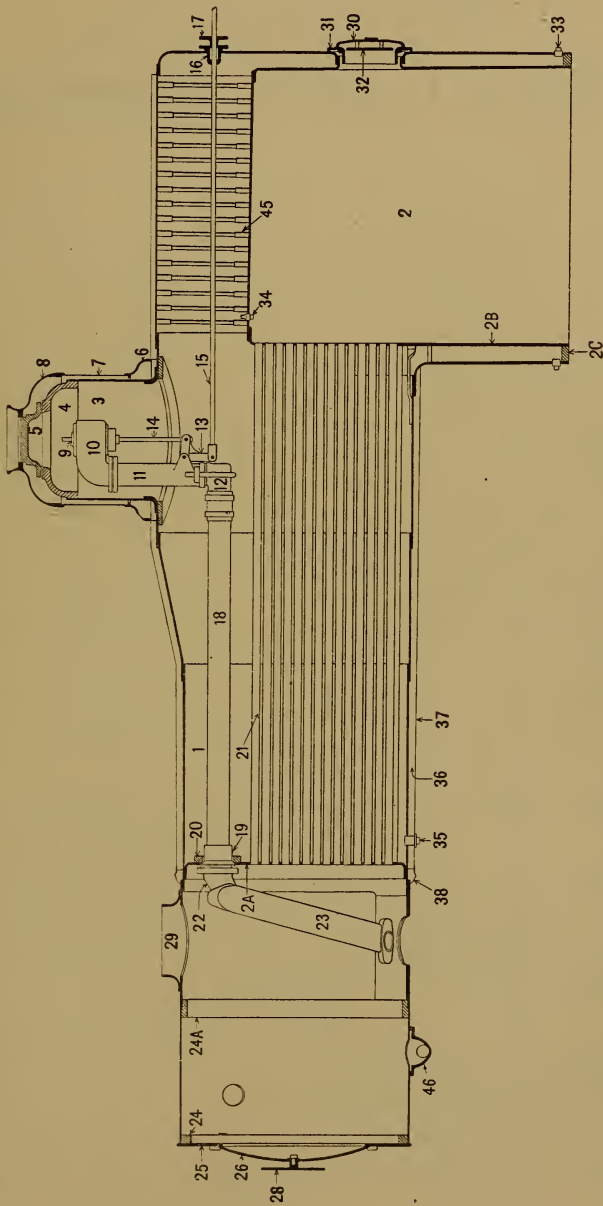


Plate 2

RADIAL STAY TYPE



Boiler and Attachments

Plates 1 and 2. Encotyle

Encouardi . .	1.	Boiler.
Encoubert . .	2.	Firebox.
Encoudam . .	2A.	Front Tube Sheet.
Encoufer . . .	2B.	Firebox " "
Encougard . .	2C.	Water Space Frame.
Encouloir . .	3.	Dome.
Encounters . .	4.	" Ring.
Encourager . .	5.	" Cap.
Encourais . .	6.	" Base.
Encourar . . .	7.	" Casing.
Encouriez . .	8.	" Cover.
Encourons . .	9.	Throttle Valve.
Encourront .	10.	" " Box.
Encourumes .	11.	" Pipe.
Encouteiro .	12.	" Elbow.
Encouto . . .	13.	" Valve Crank.
Encouturer .	14.	" " Rod.
Encradle . .	15.	" " Stem.
Encradling .	16.	" Stuffing Box.
Encranio . .	17.	" " " Gland.
Encrasser . .	18.	Dry Pipe.
Encratitas .	19.	" Front End.
Encratiti . .	20.	" Ring on Tube Sheet.
Encravacao .	21.	Tubes.
Encravar . .	22.	Double Cone.
Encravo . . .	23.	Steam Pipes, R and L.
Encreases . .	24.	Smokebox Ring Front.
Encrepe . . .	24A.	" " Middle.
Encrespado .	24B.	" " Back.

Encrespar . .	25.	Smokebox Front.
Encrespeis . .	26.	“ Door.
Encrespo . .	27.	“ “ Liner.
Encrèsta . .	28.	Number Plate.
Encrestada . .	29.	Smoke Stack Base.
Encrimson . .	30.	Fire Door.
Encrinic . .	31.	“ “ Frame.
Encrinital . .	32.	“ “ Liner.
Encrisped . .	33.	Corner Plug.
Encristado . .	34.	Fusible “
Encrivore . .	35.	Waist “
Encroach . .	36.	Lagging.
Encroached . .	37.	Jacket.
Encroise . .	38.	Smokebox Band.
Encrotter . .	39.	Safety Valve.
Encroutant . .	40.	“ “ Stem.
Encruar . .	41.	“ “ Spring.
Encruecer . .	42.	“ “ “ Cap.
Encruzado . .	43.	Relief Lever.
Encuaderno . .	44.	Crown Bar.
Encubabais . .	45.	Staybolt.
Encubado . .	46.	Spark Ejector.

In ordering steam pipes (No. 23), it will be necessary to specify the side, if both are not wanted.

Smoke stack base (No. 29), while shown in one piece on this plate, is frequently made in two parts, as shown on Plate 38, and either part can be had by referring to the latter plate. See Plate 4 for steel base.

Jacket bands are not given a number in this list, as they are easily designated without.

In many cases patented valves are used instead of the safety valve shown on this plate. In ordering, state whether valve is wanted with or without relief lever.

Plate 3

Fig. 1

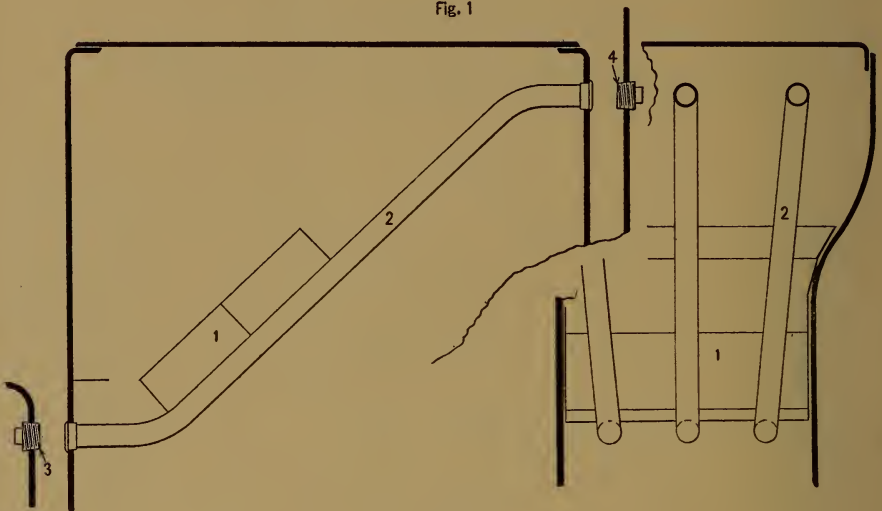
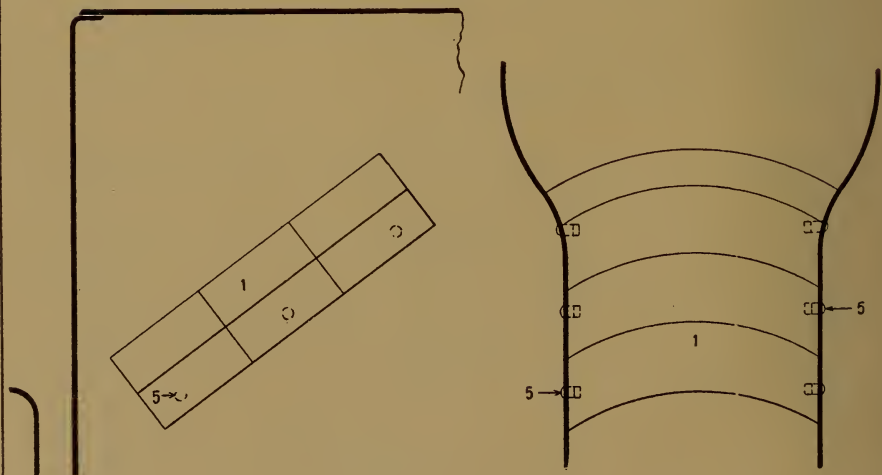


Fig. 2



Arrangement of Fire Bricks in Firebox

Plate 3. Encubamos

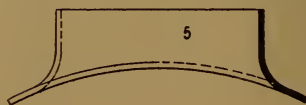
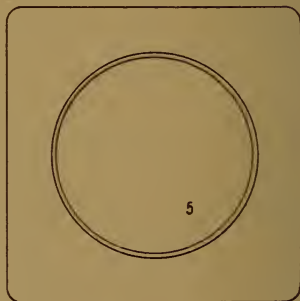
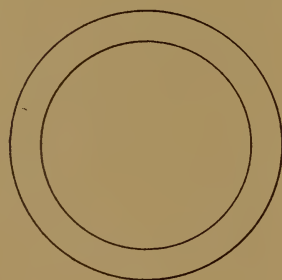
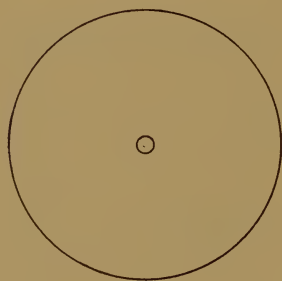
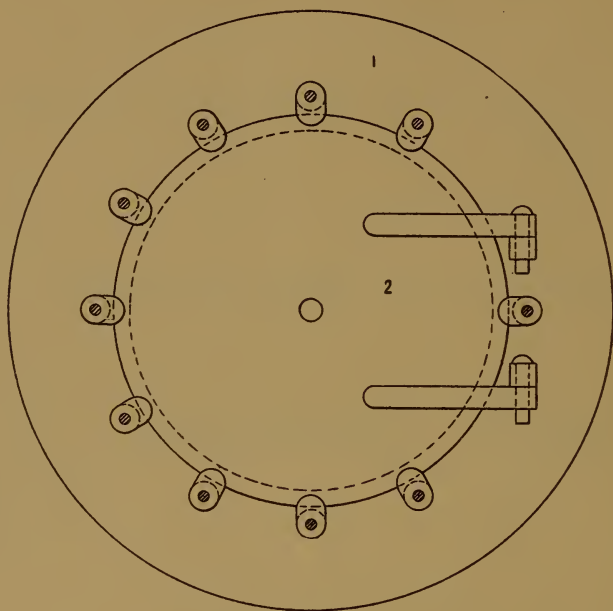
FIGURE 1.—Bricks supported on Tubes.

- | | | |
|------------|--------|--------------------|
| Encubar | . . 1. | Fire Brick. |
| Encubarian | . 2. | “ “ Tube. |
| Encubaron | . 3. | “ “ “ Plug, Front. |
| Encubertar | . 4. | “ “ “ “ Back. |

FIGURE 2.—Bricks supported on Studs.

- | | | |
|------------|------|------------------|
| Encubierta | . 5. | Fire Brick Stud. |
|------------|------|------------------|

Plate 4



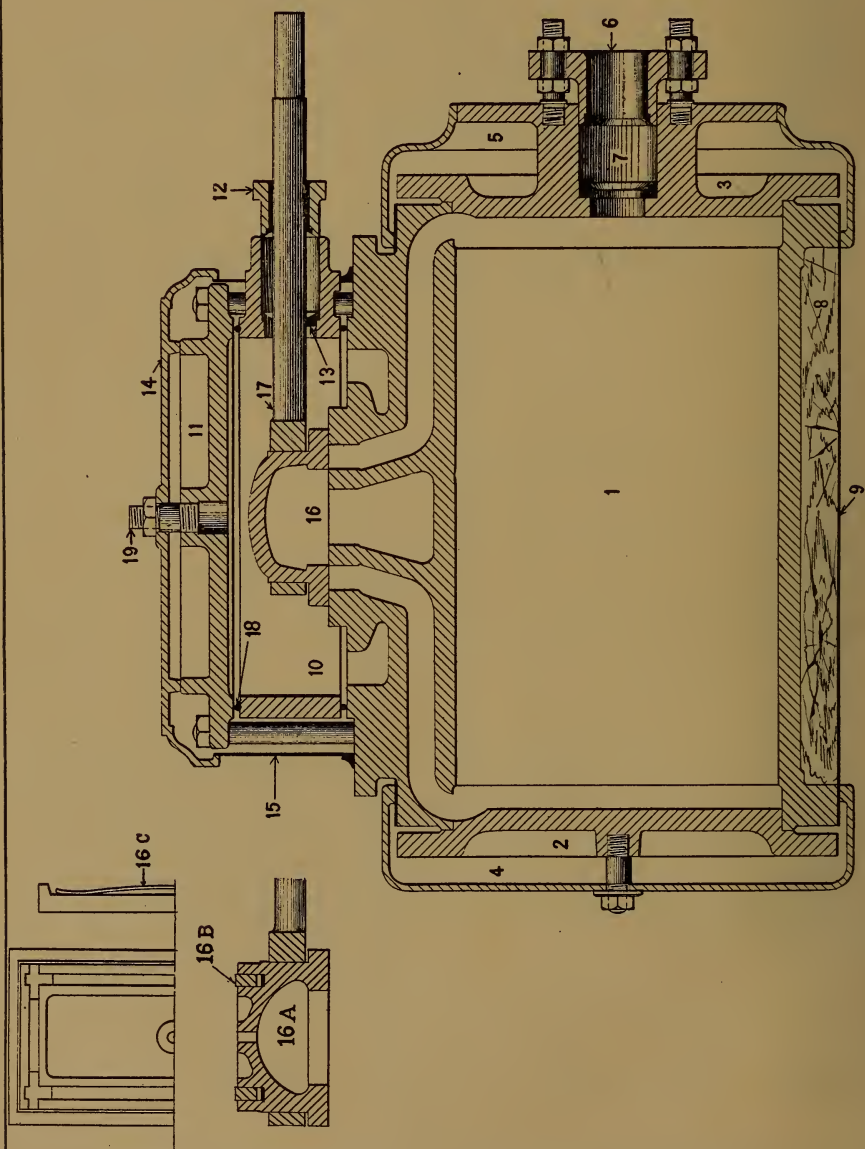
Pressed Steel Smokebox Front, Cylinder Head Cover, and Stack Base

Plate 4. Encubridor

- Encubrimos . 1. Smokebox Front.
Encubrir . . 2. " Door,
Encubriras . 3. Cylinder Head Cover, Front.
Encubriria . 4. " " " Back.
Encuentras . 5. Stack Base.

Plates 1 and 2 show cast iron smokebox fronts and stack bases, and Plate 5 cast iron cylinder head covers. These have in recent years been superseded on many railroads by similar parts made of steel sheets pressed while hot in dies giving them the required forms. They are much stronger, and consequently more durable than cast iron, present a simple, neat appearance, and in many cases when injured can be brought back to their original shape.

Plate 5



Single-Expansion Cylinder, Steam Chest and Attachments

Plate 5. Encuentro

Encuerda . .	1.	Cylinder.
Encugentar . .	2.	Front Head.
Encuirer . .	3.	Back “
Enculasse . .	4.	Front Casing Cover.
Encumber . .	5.	Back “ “
Encumbraba . .	6.	Cylinder Gland, R. and L.
Encumbrar . .	7.	“ “ Bottom Ring.
Encumbreis . .	8.	Wood Lagging.
Encumbro . .	9.	Casing.
Encumear . .	10.	Steam Chest.
Encunare . .	11.	“ “ Cap.
Encunasen . .	12.	“ “ Gland.
Encurralar . .	13.	“ “ “ Bottom Ring.
Encurtador . .	14.	“ “ Casing Cover.
Encurtain . .	15.	“ “ Casing.
Encurtamos . .	16.	“ “ Valve.
Encurtidos . .	16A.	“ “ “ Balanced Pattern.
Encurtiera . .	16B.	“ “ “ Packing Strips.
Encurtir . .	16C.	“ “ “ “ Springs.
Encurtiras . .	17.	“ “ “ Yoke.
Encuvage . .	18.	“ “ Joint.
Encyanthe . .	19.	“ “ Oil Pipe Stem.

If a single cylinder, head, gland, or steam chest is ordered, the side required for should be specified.

Plate 6

FIG. 1

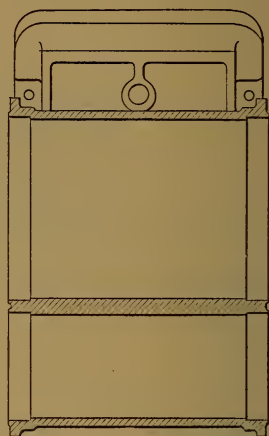
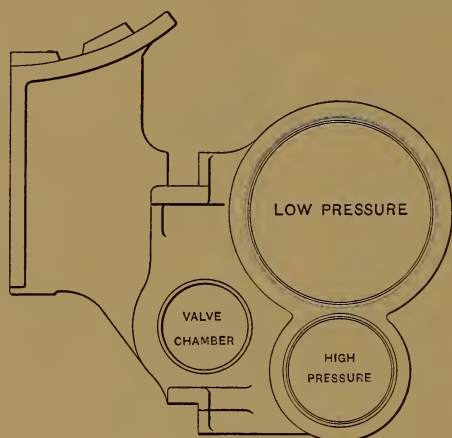
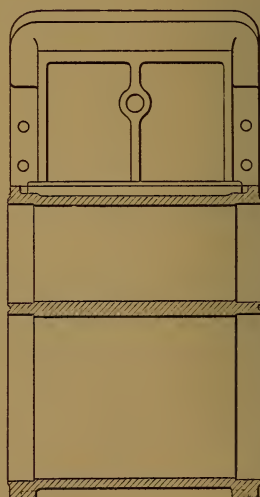
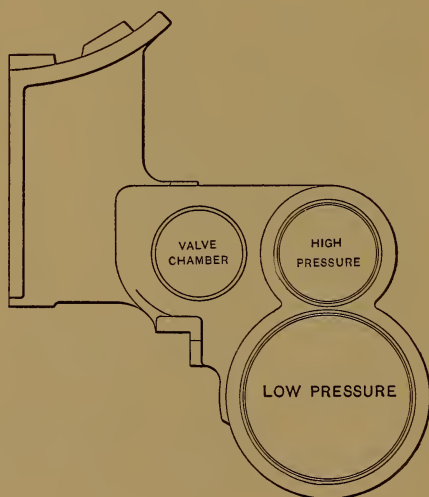


FIG. 2



Baldwin Compound Cylinders (Four Cylinder, Vauclain System)

Plate 6. Encycle

FIGURE 1.

Baldwin Compound Cylinders with Low-Pressure Cylinder above High-Pressure, showing one side of locomotive.

FIGURE 2.

Baldwin Compound Cylinders with High-Pressure Cylinder above Low-Pressure, showing one side of locomotive.

The High- and Low-Pressure Cylinders are cast in one piece.

Plate 7

DIAGRAM SHOWING COURSE OF STEAM
IN
FOUR CYLINDER COMPOUND LOCOMOTIVE

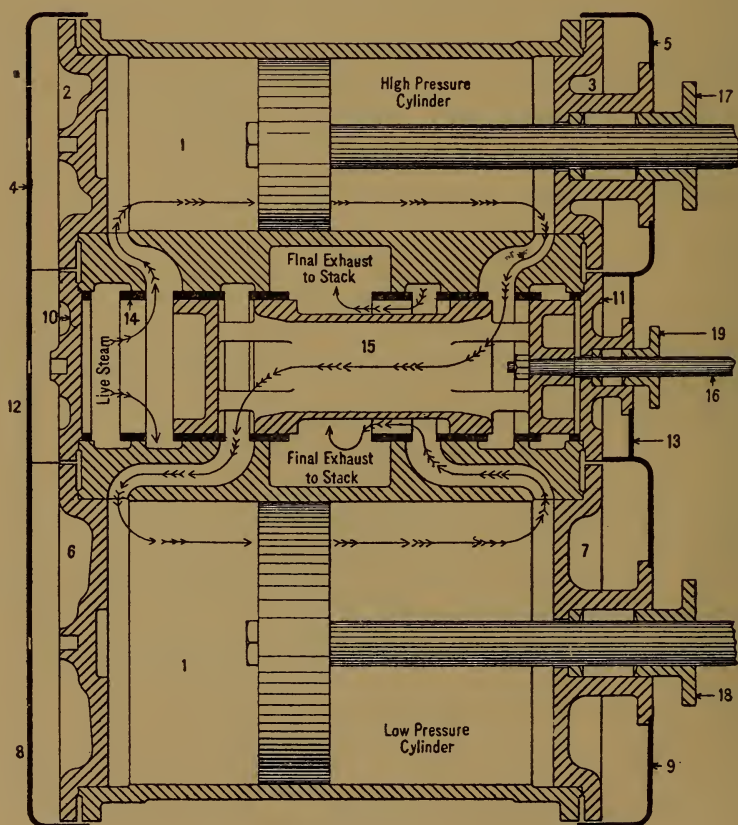


Diagram of Baldwin Compound Cylinders (Vauclain System), Showing the Course of Steam in the Cylinders and Valve Chamber

Plate 7. Encycleme

Encyclia	. .	1.	Cylinder.				
Encyclical	. .	2.	High-Pressure Front Cylinder Head.				
Encyclios	. .	3.	"	Back	"	"	
Encyclique	. .	4.	"	Front	"	"	Casing Cover.
Encyclon	. .	5.	"	Back	"	"	" "
Encymon	. .	6.	Low-Pressure Front	"	"		
Encyoneme	. .	7.	"	Back	"	"	
Encyrte	. . .	8.	"	Front	"	"	Casing Cover.
Encyrtite	. .	9.	"	Back	"	"	" "
Encystment	. .	10.	Front Valve Chamber Head.				
Encytis	. . .	11.	Back	"	"	"	
Encyto	. . .	12.	Front	"	"	"	Casing Cover.
Endacin	. . .	13.	Back	"	"	"	" "
Endagrie	. .	14.	Valve Chamber Bushing.				(See Plate 13).
Endamage	. .	15.	Piston Valve.		"	"	
Endamaging	. .	16.	"	"	Stem.	"	"
Endamenes	. .	17.*	High-Pressure Cylinder Gland.				
Endanger	. .	18.*	Low-Pressure	"	"		
Endangered	. .	19.*	Valve Chamber Gland.				

If a single cylinder, head, casing cover, bushing, valve, stem, or gland is ordered, the side required for should be specified.

*Metallic Packing is used in all Stuffing Boxes of Compound Cylinders. (See Plates 91 and 92).

Plate 8

DIAGRAM SHOWING COURSE OF STEAM
IN
BALANCED COMPOUND LOCOMOTIVE

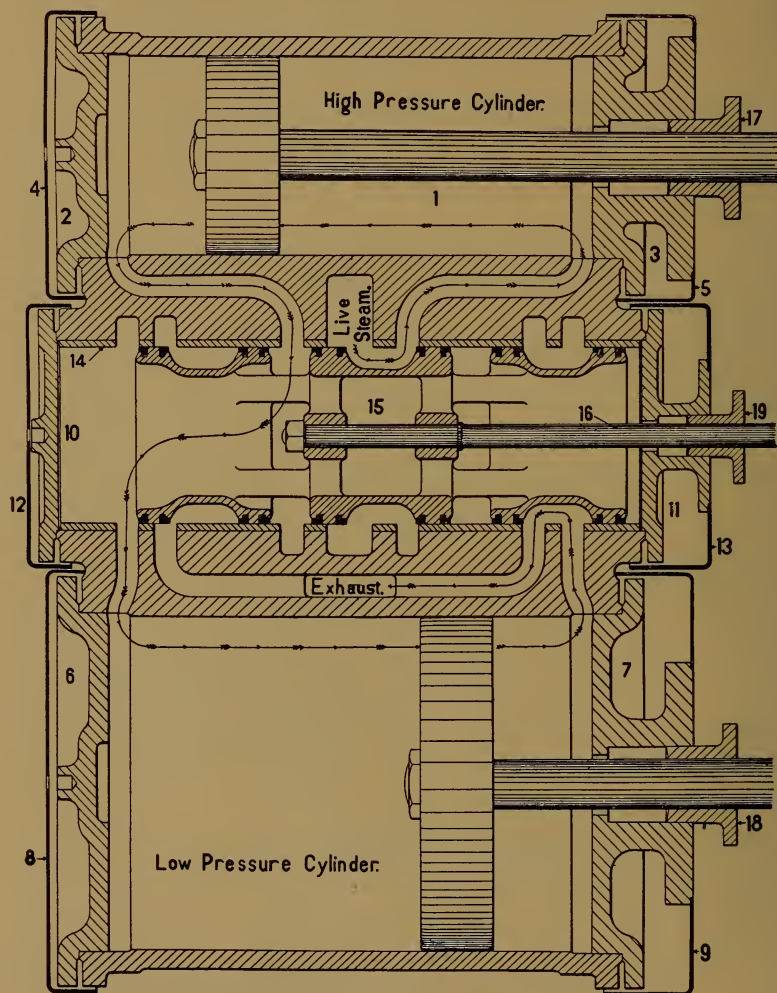


Diagram of Baldwin Balanced Compound Cylinders Showing the Course of Steam in the Cylinders and Valve Chamber

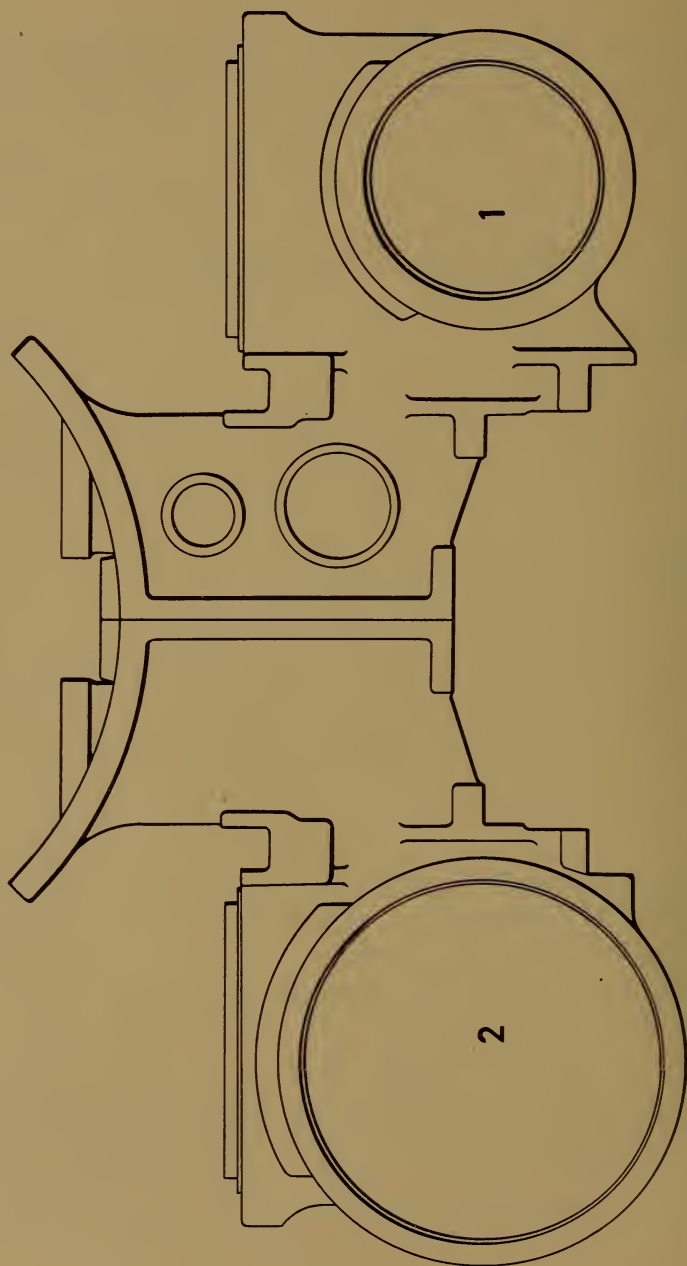
Plate 8. Endangion

Endark . . .	1.	Cylinder.					
Endarken . .	2.	High Pressure Front Cylinder Head.					
Endarkened .	3.	"	"	Back	"	"	
Endarking . .	4.	"	"	Front	"	"	Casing Cover.
Endaubage . .	5.	"	"	Back	"	"	" "
Endaubeur . .	6.	Low	"	Front	"	"	
Endazeh . . .	7.	"	"	Back	"	"	
Endearedly . .	8.	"	"	Front	"	"	Casing Cover.
Endearment .	9.	"	"	Back	"	"	" "
Endeavour . .	10.	Front Valve Chamber Head.					
Endebles . .	11.	Back	"	"	"	"	
Endeblezes .	12.	Front	"	"	"	"	Casing Cover.
Endecader . .	13.	Back	"	"	"	"	" "
Endecaedro .	14.	Valve Chamber Bushing.					(See Plate 13.)
Endecagono .	15.	Piston Valve.			"	"	
Endechador .	16.	"	"	Stem.	"	"	
Endechamos .	17.*	High Pressure Cylinder Gland.					
Endechando .	18.*	Low	"	"	"	"	
Endechar . .	19.*	Valve Chamber Gland.					

If a single cylinder, head, casing cover, bushing, valve, stem, or gland is ordered, the side required for should be specified.

*Metallic Packing is used in all Stuffing Boxes of Compound Cylinders. (See Plates 91 and 92).

Plate 9



Baldwin Compound Cylinders, Two Cylinder Type

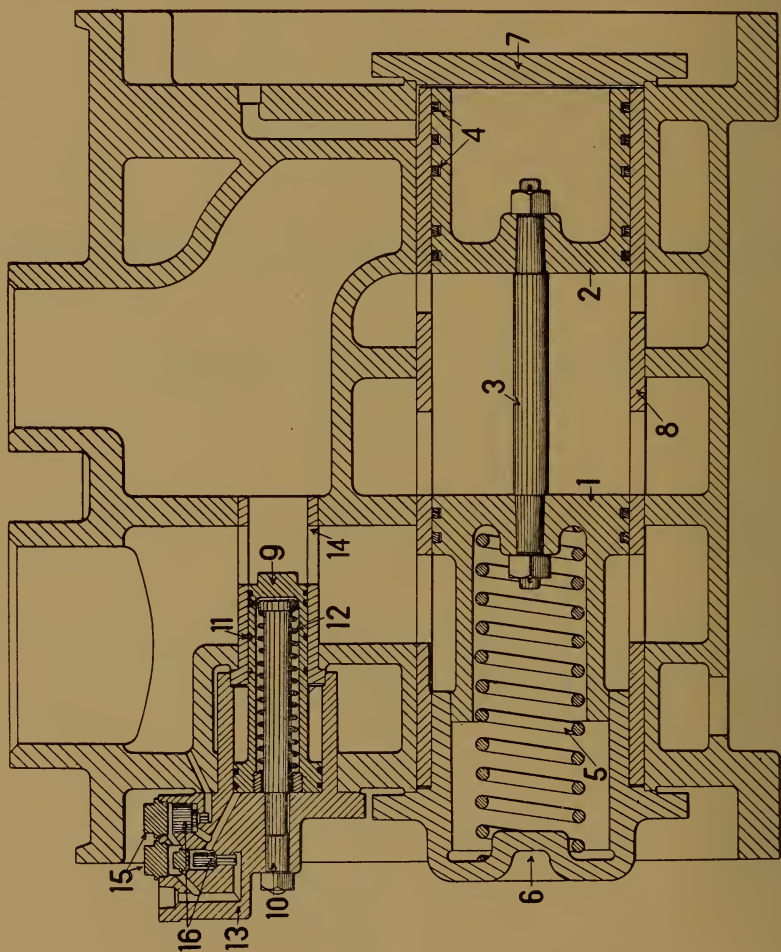
Plate 9. Endecharon

Endechases . 1. High-Pressure Cylinder.

Endecheis . . 2. Low-Pressure Cylinder.

In ordering steam chest, steam chest valve, steam chest cap or casing, cylinder heads or cylinder head covers, use code words shown on Plate 5, specifying for which side the parts are required.

Plate 10



Intercepting and Reducing Valves for Baldwin Two Cylinder Compound Locomotives

Plate 10. Endechosos

Endehesado . . .	1.	Intercepting Valve Front.
Endehesais . . .	2.	“ “ Back.
Endehesar . . .	3.	“ “ Distance Bar.
Endeictic . . .	4.	“ “ Packing Ring.
Endeixis . . .	5.	“ “ Spring.
Endelechia . . .	6.	“ “ Front Head.
Endellione . . .	7.	“ “ Back “
Endelsy . . .	8.	“ “ Bushing.
Endemial . . .	9.	Reducing Valve Piston.
Endemicite . . .	10.	“ “ Rod.
Endemico . . .	11.	“ “ Packing Ring.
Endemie . . .	12.	“ “ Spring.
Endemique . . .	13.	“ “ Head.
Endemoniar . . .	14.	“ “ Bushing.
Endenize . . .	15.	“ “ Plugs.
Endenizing . . .	16.	“ “ Poppet Valves.

Plate 11

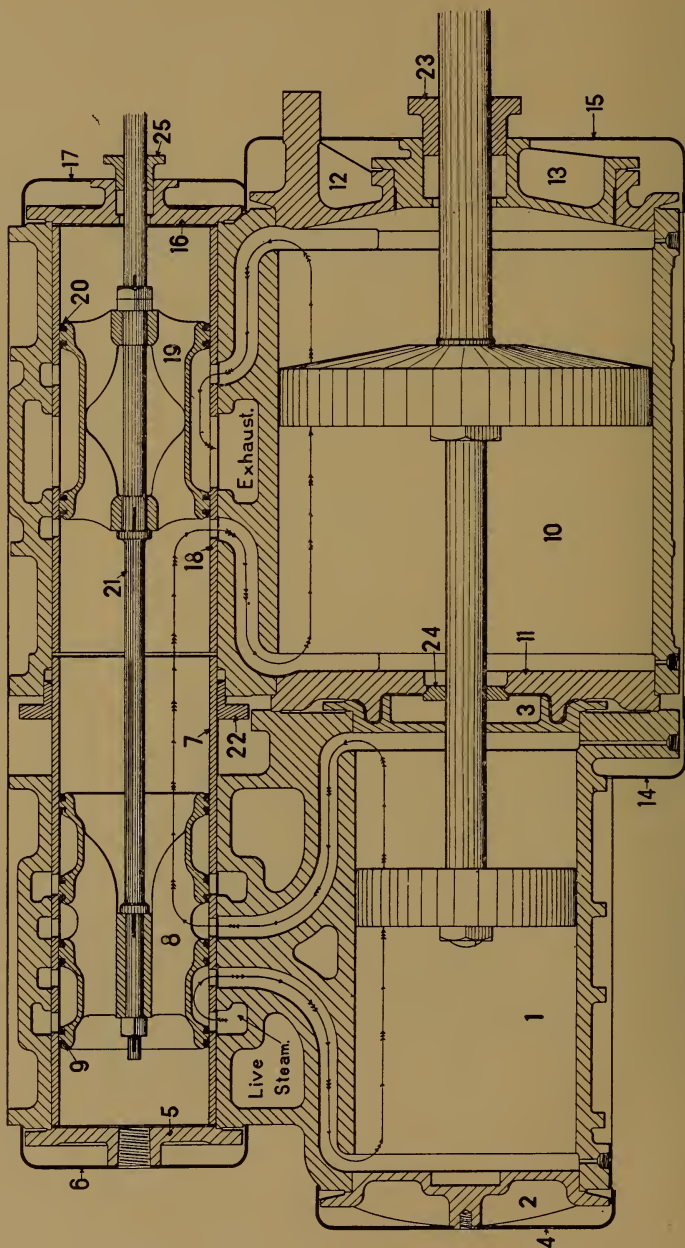


Diagram of Tandem Compound Cylinders, Showing the Course of Steam in the Cylinders and Valve Chamber

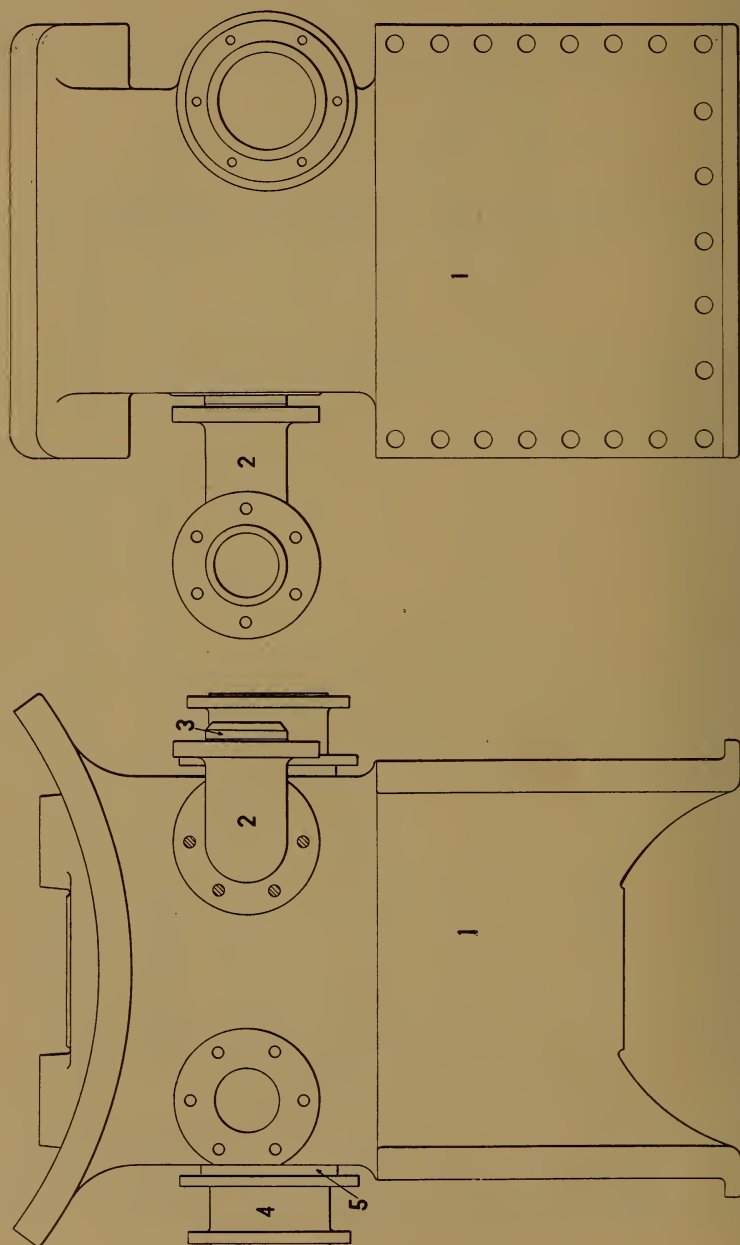
Plate 11. Endentacao

Endentadas .	1.	High-Pressure Cylinder.
Endentado .	2.	“ “ Front Head.
Endentamos .	3.	“ “ Back “
Endentaron .	4.	“ “ Front “ Cover.
Endentecer .	5.	“ “ Valve Chamber Head.
Endenteis .	6.	“ “ “ “ “ Cover.
Endentezco .	7.	“ “ “ Bushing.
Endenture .	8.	“ “ Piston Valve.
Endeonose .	9.	“ “ “ “ Rings.
Endeosar .	10.	Low-Pressure Cylinder.
Endeque .	11.	“ “ Front Head.
Enderecar .	12.	“ “ Back “
Endereco .	13.	“ “ “ “ (Central).
Enderezado .	14.	“ “ Front Head Cover.
Enderezeis .	15.	“ “ Back “ “
Endermatic .	16.	“ “ Valve Chamber Head.
Endermic .	17.	“ “ “ “ “ Cover.
Enderon .	18.	“ “ “ Bushing.
Enderum .	19.	“ “ Piston Valve.
Endetteras .	20.	“ “ “ “ Rings.
Endettiez .	21.	Valve Stem.
Endettons .	22.	Intermediate Valve Chamber Gland.
Endever .	23.	*Low-Pressure Cylinder Gland.
Endexa .	24.	*Intermediate Cylinder Gland.
Endgueltig .	25.	*Valve Chamber Gland.

If a single cylinder, head, casing cover, bushing, valve, stem or gland is ordered, the side required for should be specified.

*Metallic Packing is used in all Stuffing Boxes of Compound Cylinders. (See Plates 91 and 92).

Plate 12



Saddle for Tandem Compound Cylinders

Plate 12. Endiable

Endiabrado . 1. Saddle.

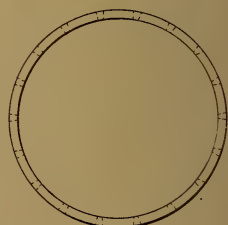
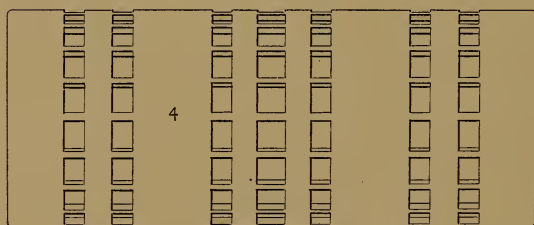
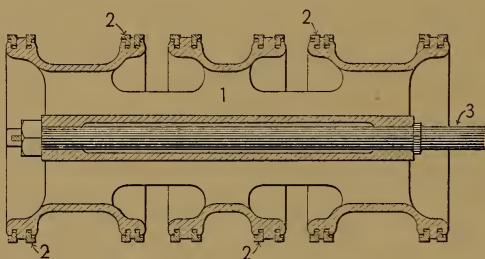
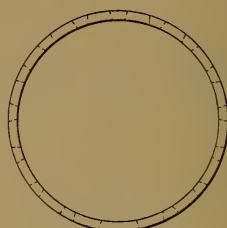
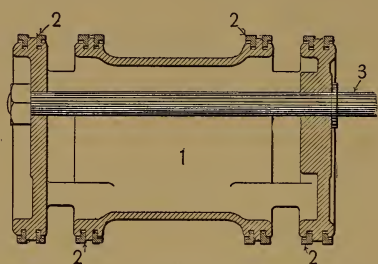
Endiaco . . . 2. Steam Pipe.

Endiamante . 3. " " Ring.

Endiandre . . 4. Exhaust Connection.

Endiaper . . 5. " " Gland.

Plate 13



Piston Valve and Bushing for Baldwin Compound
Locomotives (Vauclain and Balanced Systems)

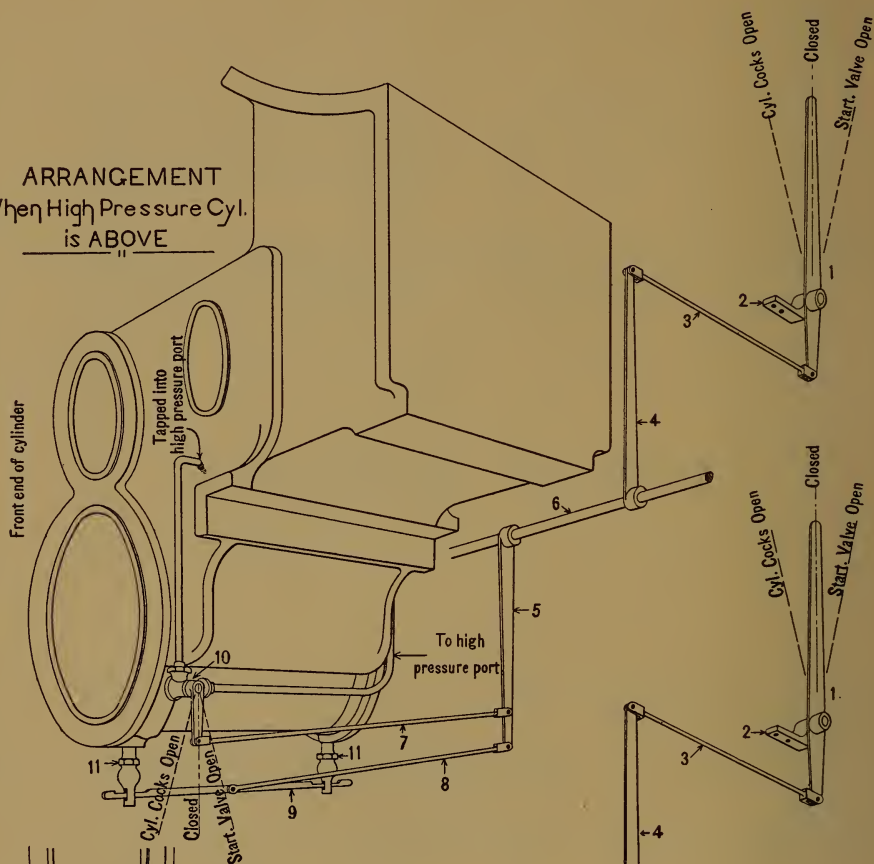
Plate 13. Endiapered

- Endica . . . 1. Piston Valve.
Endicuzza . . 2. “ “ Packing Ring.
Endigue . . . 3. “ “ Stem.
Endilgada . . 4. Valve Chamber Bushing.

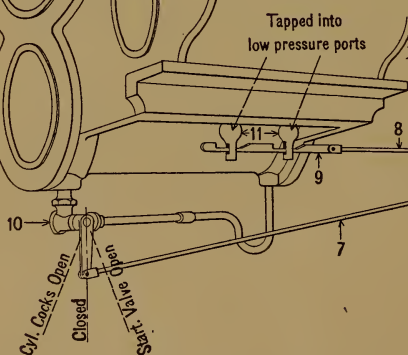
If a single valve, stem, or bushing is ordered, the side required for should be specified.

Plate 14

ARRANGEMENT
When High Pressure Cyl.
is ABOVE



Front end of cylinder



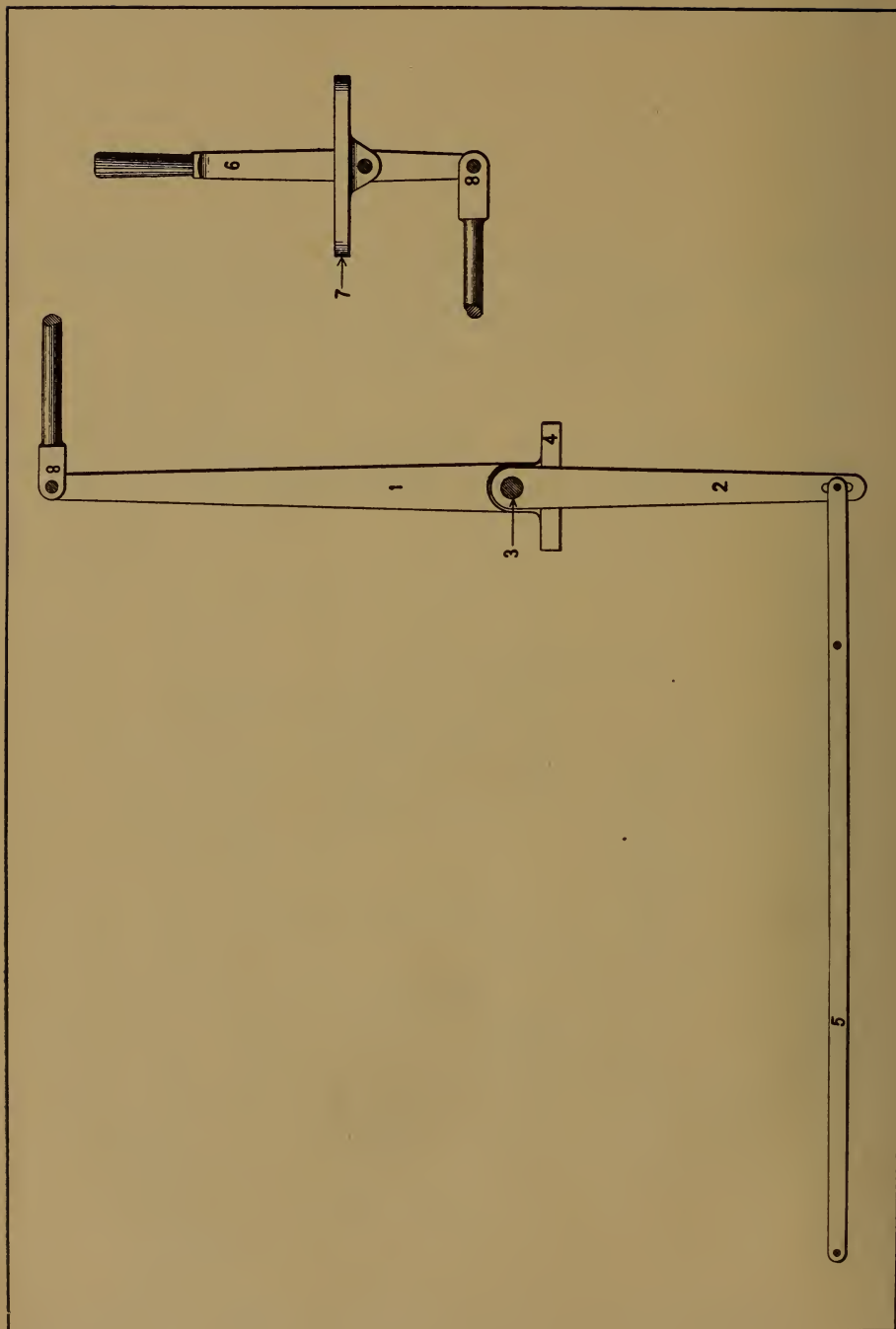
ARRANGEMENT
When High Pressure Cyl.
is BELOW

Arrangement of Starting Valves and Cylinder Cocks for Baldwin Compound Locomotives (Vauclain System)

Plate 14. Endilgador

- Endilgamos . 1. Starting Valve Lever in Cab.
- Endilgar . . 2. " " " Fulcrum in Cab.
- Endilgaron . 3. " " Rod from Cab.
- Endilgases . 4. Upper Arm.
- Endilgueis . 5. Lower "
- Endimanche . 6. Shaft.
- Endiosado . 7. Starting Valve Rod under Cylinder.
- Endiosamos . 8. Cylinder Cock " " "
- Endiosaron . 9. " " Strip.
- Endiosases . 10. Starting Valve.
- Endioseis . . 11. Cylinder Cock.

Plate 15

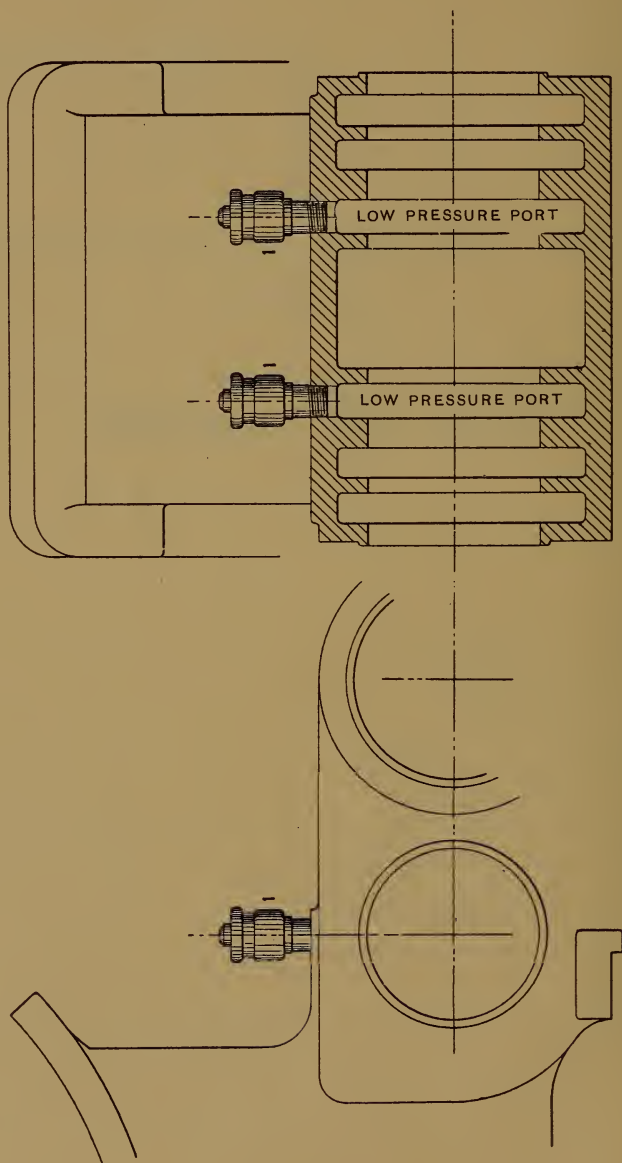


Cylinder Cock Work, for Single-Expansion Locomotives

Plate 15. Endiple

-
- Endireitar . . 1. Upper Arm.
Endive . . . 2. Lower “
Endivia . . . 3. Shaft.
Endknospe . 4. “ Bearing.
Endkopf . . . 5. Cock Strips.
Endless . . . 6. Lever in Cab.
Endlessly . . 7. “ Fulcrum.
Endlich . . . 8. Coupling Rod Jaws.

Plate 16

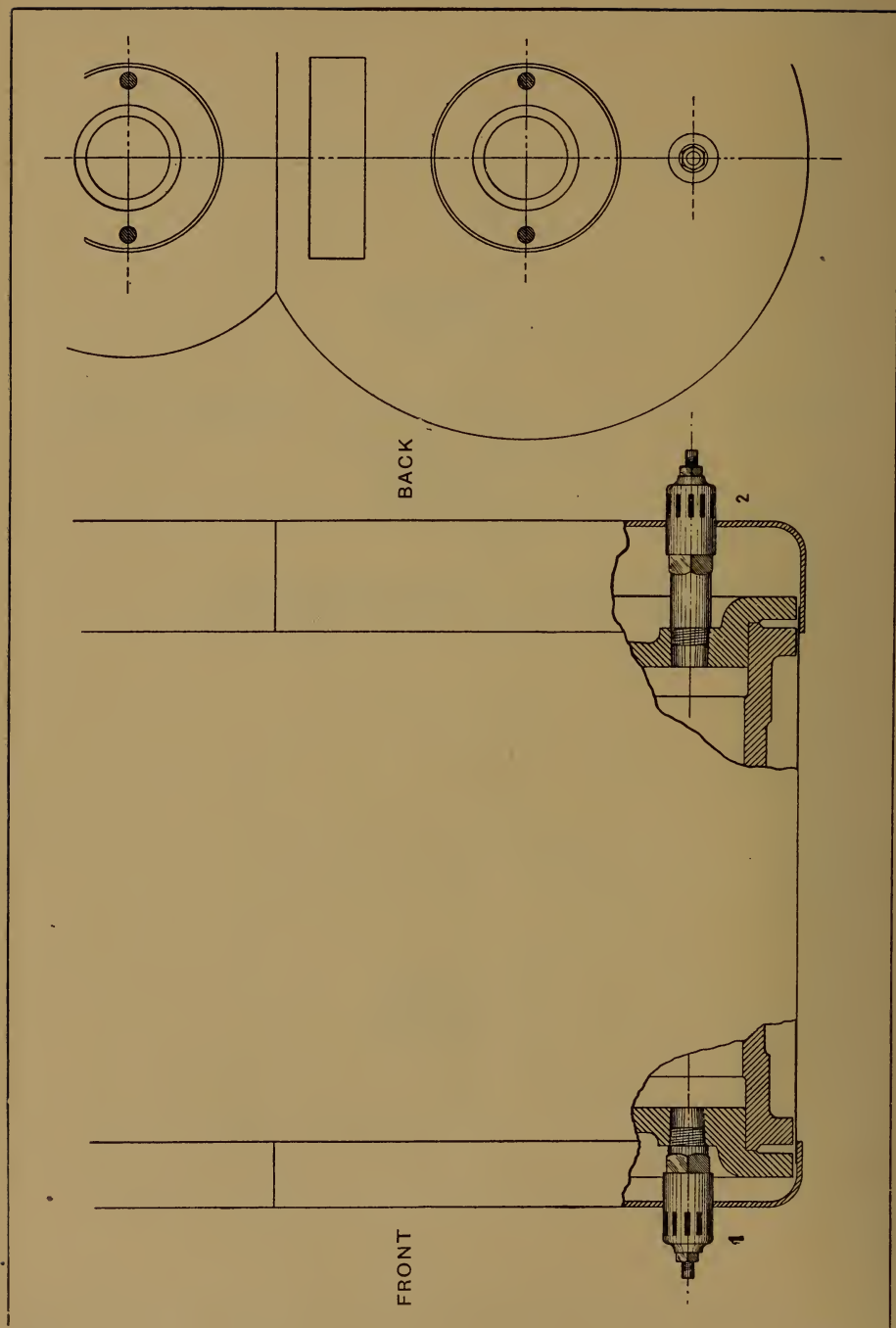


Vacuum Valve for Low-Pressure Cylinder Ports
(Vauclain System)

Plate 16. Endlichere

Endlong . . . 1. Low-Pressure Port Vacuum Valve.

Plate 17



Relief Valve for Low-Pressure Cylinder Heads (Vauclain System)

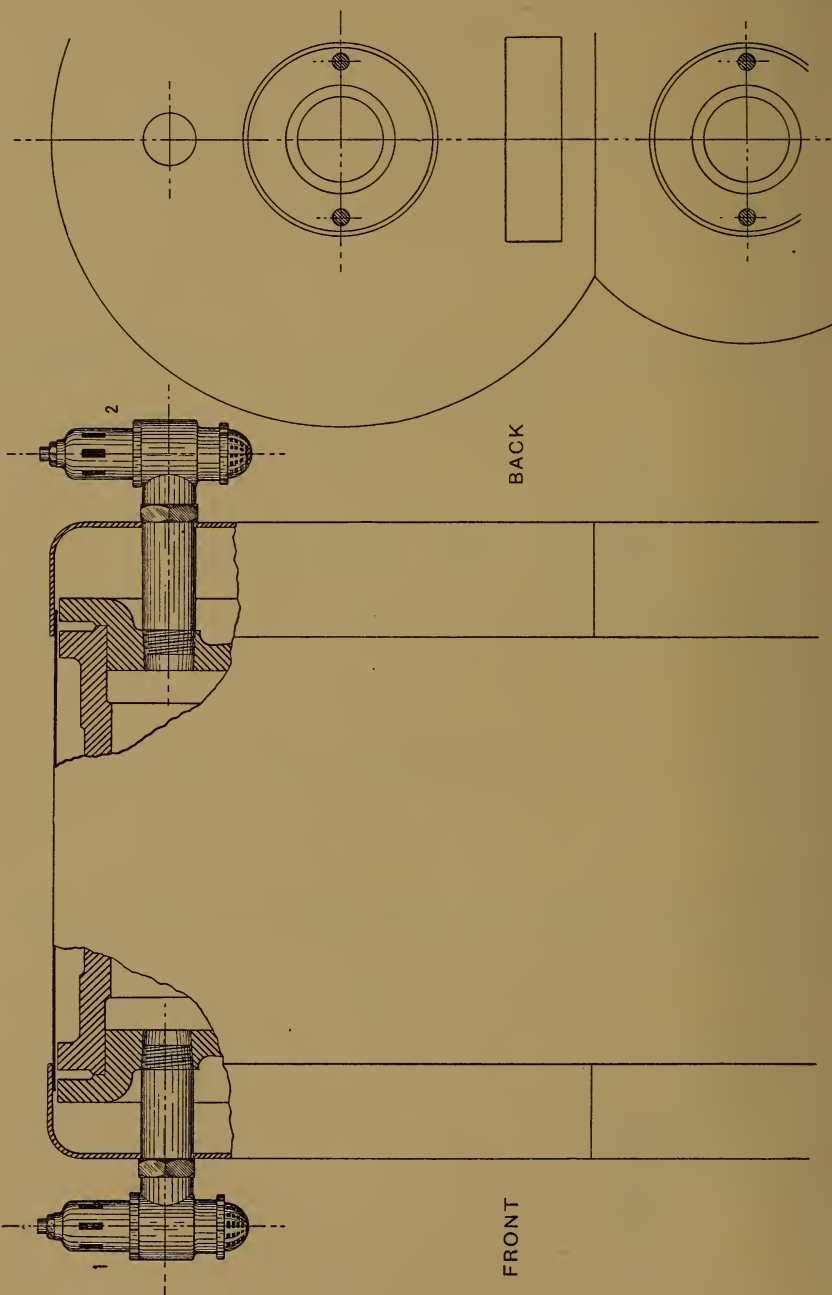
Plate 17. Endmost

Endoblado . 1. Low-Pressure Cylinder Head Relief Valve, Front.

Endocardio . 2. “ “ “ “ “ Back.

In ordering a single valve, state whether it is wanted for front or back cylinder head.

Plate 18



Combined Relief and Vacuum Valve for Low- Pressure Cylinder Heads (Vauclain System)

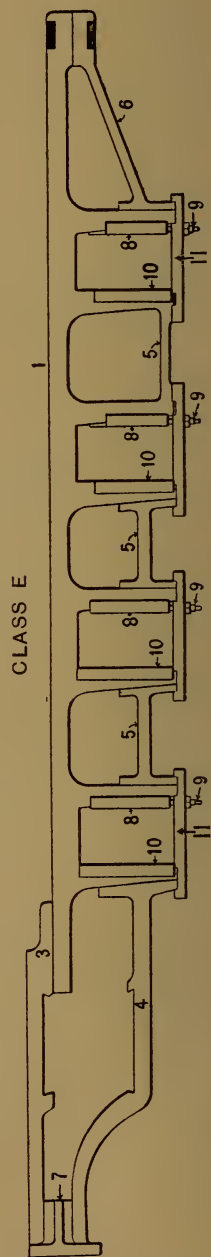
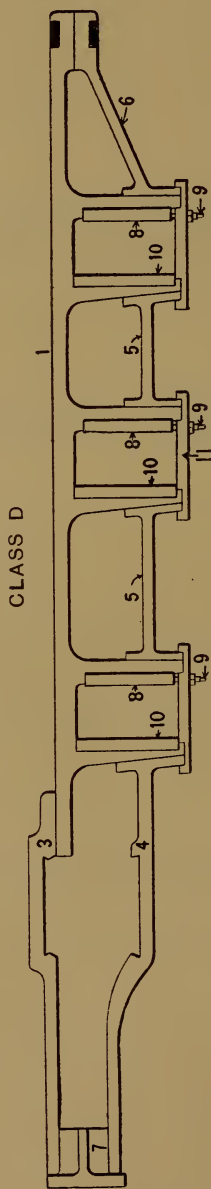
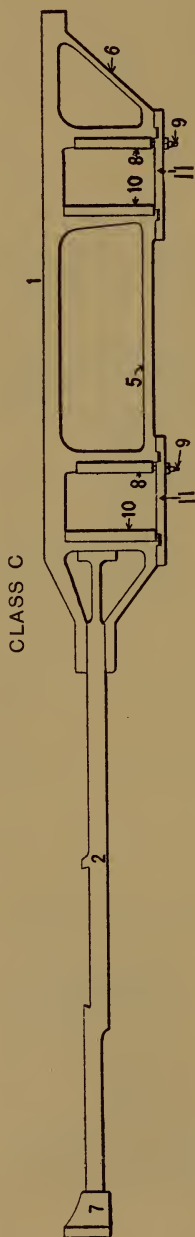
Plate 18. Endocarp.

Endocarpei . 1. Low-Pressure Cylinder Head Relief and Vacuum
Valve, Front.

Endocarpon . 2. Low-Pressure Cylinder Head Relief and Vacuum
Valve, Back.

In ordering a single valve, state whether it is wanted for front or
back cylinder head.

Plate 19



Frames and Pedestals

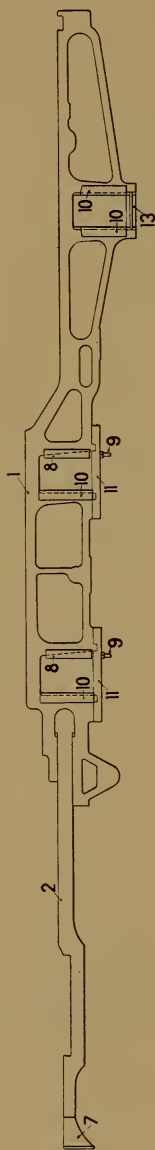
Plate 19. Endoceras

Endochroa	. 1.	Top Rail and Pedestals.
Endochromo	2.	Front Rail.
Endocladie	. 3.	“ “ Top.
Endocrane	. 4.	“ “ Bottom
Endoctorer	. 5.	Middle Brace.
Endoctrine	. 6.	Back “
Endocus	. . 7.	Frame Filling Piece.
Endocyme	. 8.	Pedestal Wedge.
Endocyst	. . 9.	“ “ Bolt.
Endodaque	. 10.	“ Gib.
Endomyque	. 11.	“ Cap.

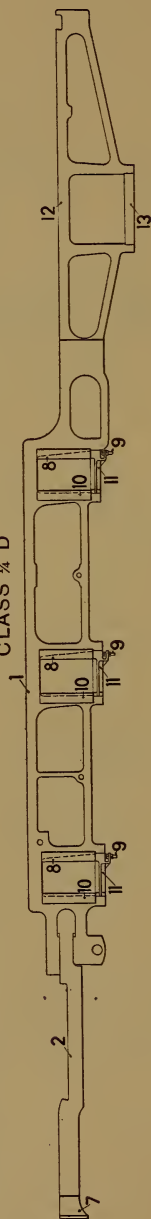
While this plate does not show the pedestal bolted to the frame rail, engines have been constructed on this plan, and when ordering a pedestal to replace, it will only be necessary to refer to its position on the frame.

Plate 20

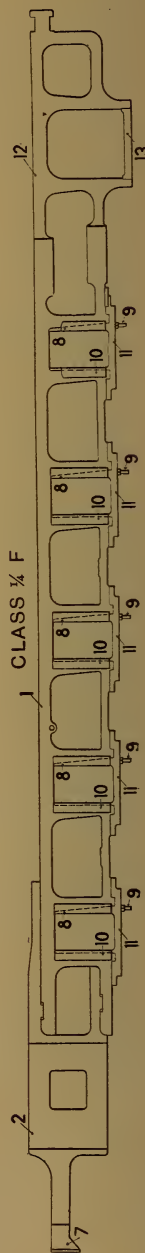
CLASS $\frac{1}{4}$ C



CLASS $\frac{1}{4}$ D



CLASS $\frac{1}{4}$ F



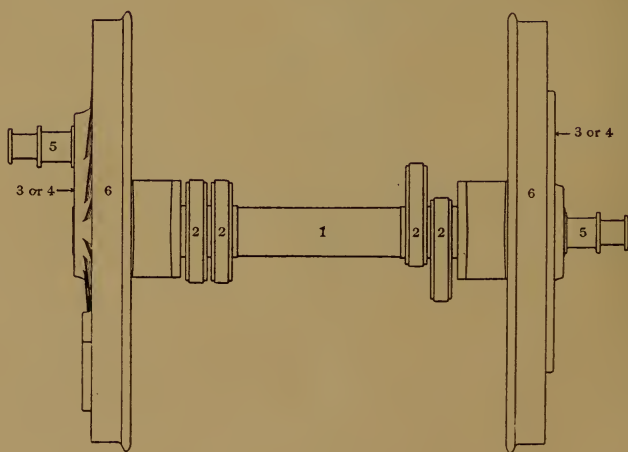
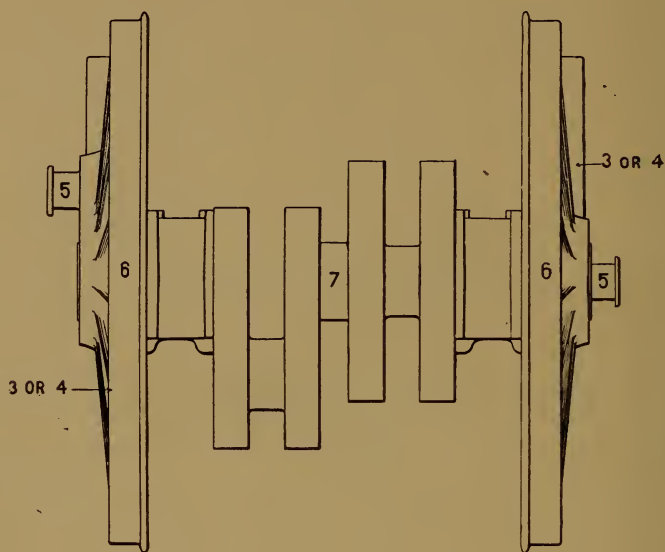
Frames and Pedestals

Plate 20. Endophlee

- Endophleon . 1. Top Rail and Pedestals.
- Endophore . 2. Front Rail.
- Endophylle . 7. Frame Filling Piece.
- Endoplast . . 8. Pedestal Wedge.
- Endopleura . 9. " " Bolt.
- Endopodite . 10. " Gib.
- Endopogon . 11. " Cap.
- Endoptere . . 12. Back Frame.
- Endoptilo . . 13. Trailing Pedestal Cap.

L O F C.

Plate 21



Driving Wheels, Axles and Tires

Plate 21. Endor

- Endorhizal . 1. Axle.
Endorhizo . 2. Eccentric.
Endormais . 3. Wheel Center (Cast Iron).
Endormant . 4. " " (Cast Steel).
Endormeur . 5. Wrist Pin.
Endormez . 6. Tire.
Endormi . . 7. Crank Axle.

Orders for wheels or their parts, when not in full sets, should indicate particular pair of wheels required, or the pair for which parts are needed.

Plate 22



Wrought Iron Driving Wheel Center (Vauclain Type)

Plate 22. Endormions

Endormiras . . Driving Wheel Center.

For many years cast iron has been used in this country for driving wheel centers. Lately, however, on account of the increased severity of locomotive service, a demand has arisen for stronger wheels, and this has been met by the wrought iron center here described.

The method of manufacture is plainly shown by the drawing. The parts are forged separately under drop and steam hammers and a hydraulic machine, and assembled as shown by the dotted lines. They are then brought to a welding heat and placed between steel dies of suitable dimensions, the upper one being connected to the piston rod of a powerful steam hammer. A few blows then weld the parts together, making a homogeneous, solid forging.

These wheels possess great strength, lightness, and beauty of design. The counterbalance is filled with lead when necessary to bring it to the required weight.

For clearer illustration of method of manufacture, (see Plate 23, Figure 1).

Plate 23

Fig. 1

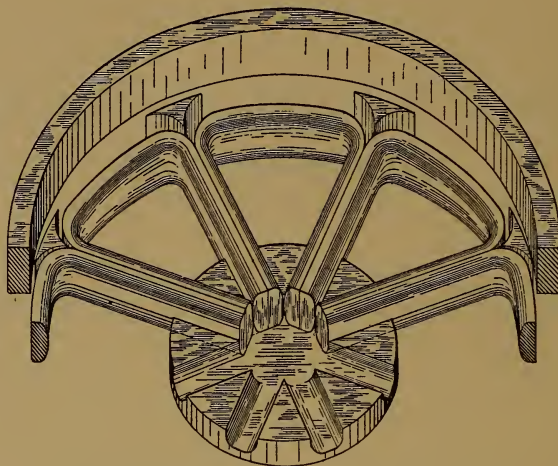
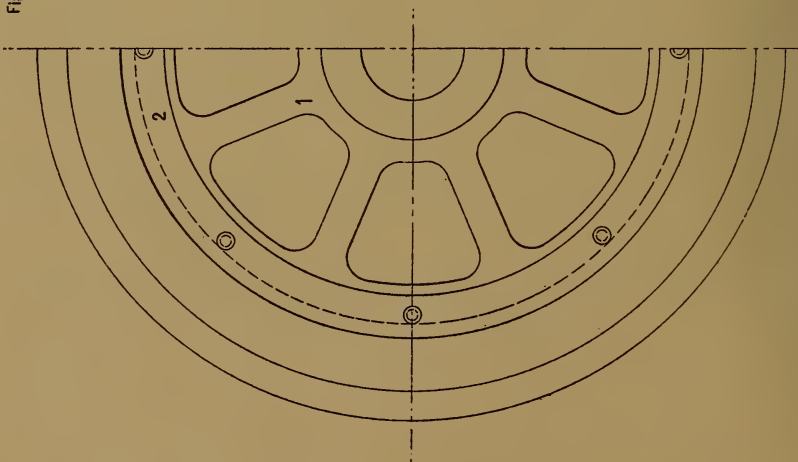
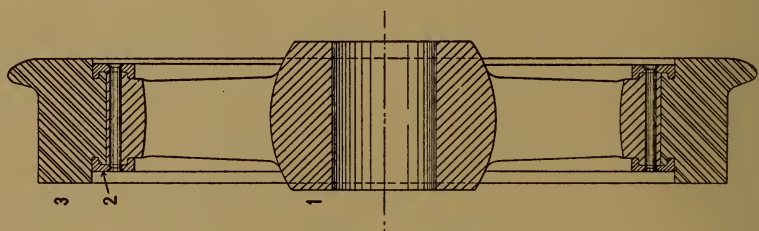


Fig. 2



Wrought Iron Engine Truck and Tender Wheel (Vauclain Type)

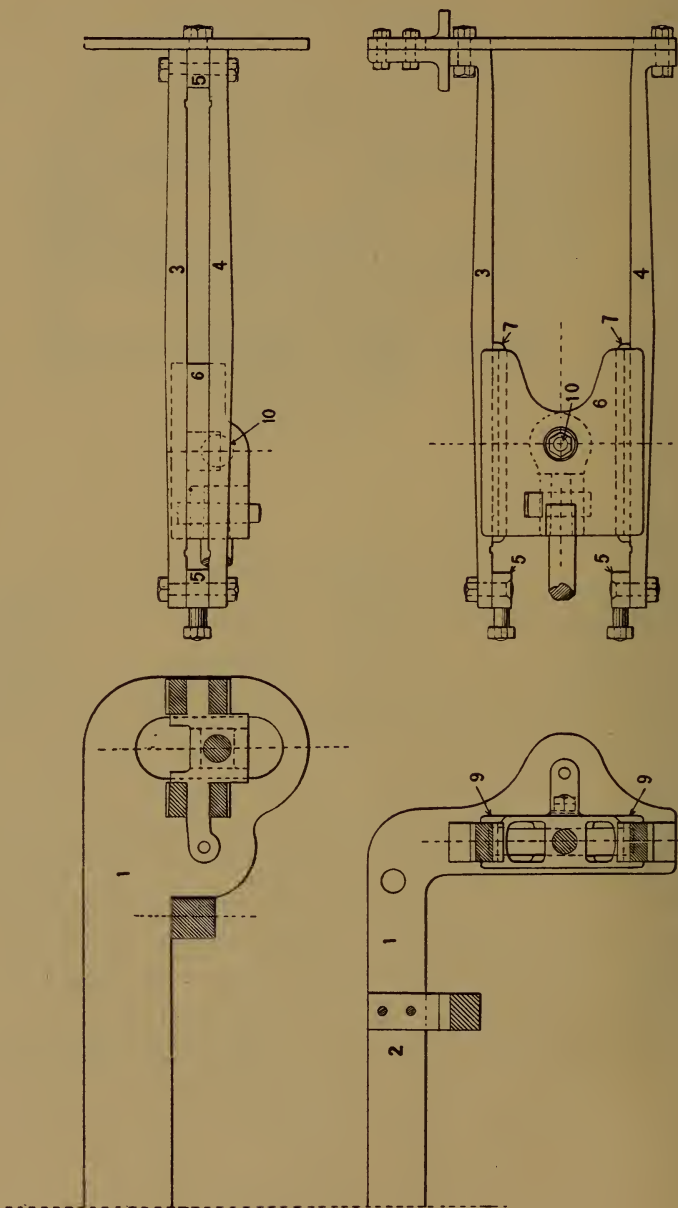
Plate 23. Endorsing

- Endosados . 1. Wheel Center.
Endosarc . . 2. Retaining Ring.
Endosareis . 3. Tire.

The conditions which brought forth the wrought iron driving wheel have caused the existence of the engine truck and tender wheel of the same type. The construction is shown by Figure 1. The tire is shrunk on the center and is further secured by two wrought iron retaining rings held by rivets (see Figure 2). The steel tire lasts much longer than the chilled tread of a cast iron wheel, and when, after having been turned several times, it is finally worn too thin for use, it can be replaced by a new one; whereas, when the tread of a cast iron wheel is worn through the chill, the whole wheel must be thrown away.

For the position of these wheels in the truck, (see Plates 42 and 72).

Plate 24



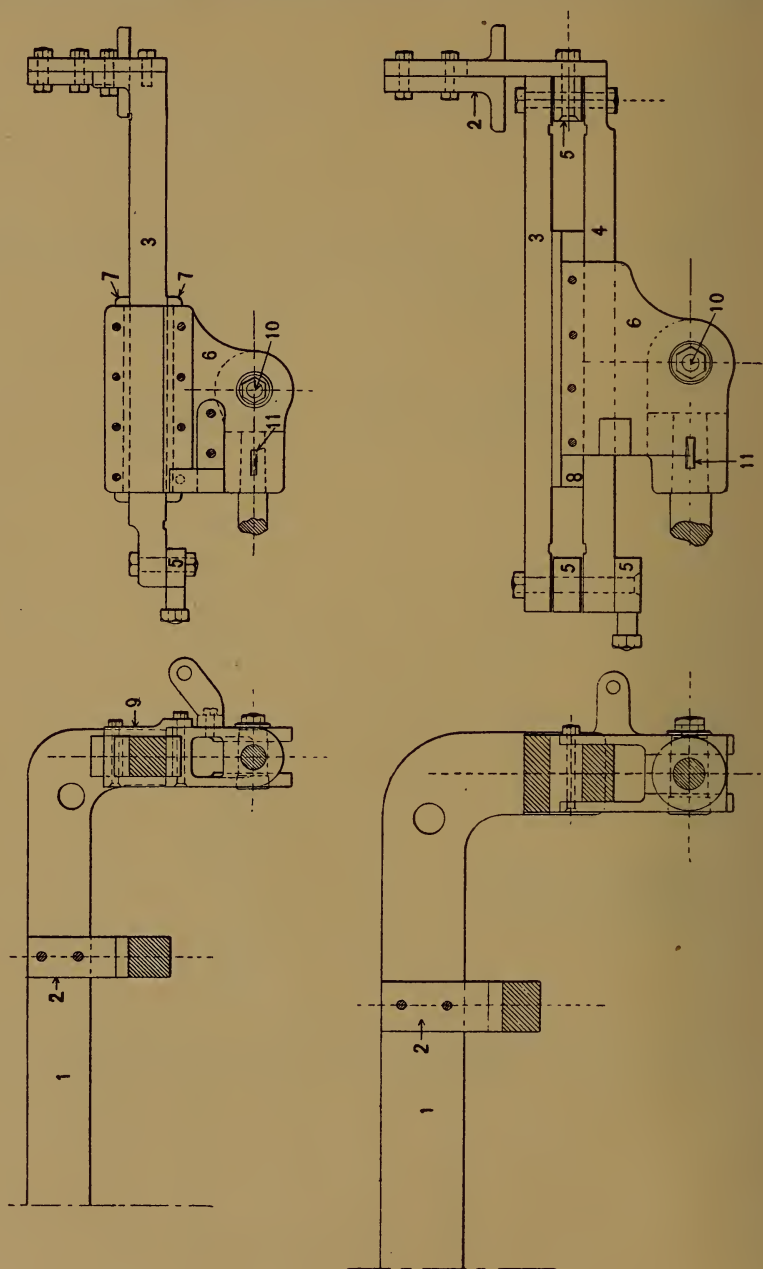
Guide Bearer, Guides, and Crosshead for Single-Expansion Locomotives

Plate 24. Endosas

Endoscopie . . .	1.	Guide Bearer.
Endoselado . . .	2.	“ “ Knee.
Endoselar . . .	3.	Top Guide Bar.
Endosimon . . .	4.	Bottom Guide Bar.
Endosiphie . . .	5.	Guide Fillings.
Endosmic . . .	6.	Crosshead.
Endosmose . . .	7.	“ “ Gibs.
Endosmosis . . .	9.	“ “ Plate.
Endosmotic . . .	10.	“ “ Pin.
Endosperma . . .	11.	“ “ Key.

Orders for guides, when not in full sets, should specify whether top or bottom guides are wanted, and for crosshead the side should be given.

Plate 25



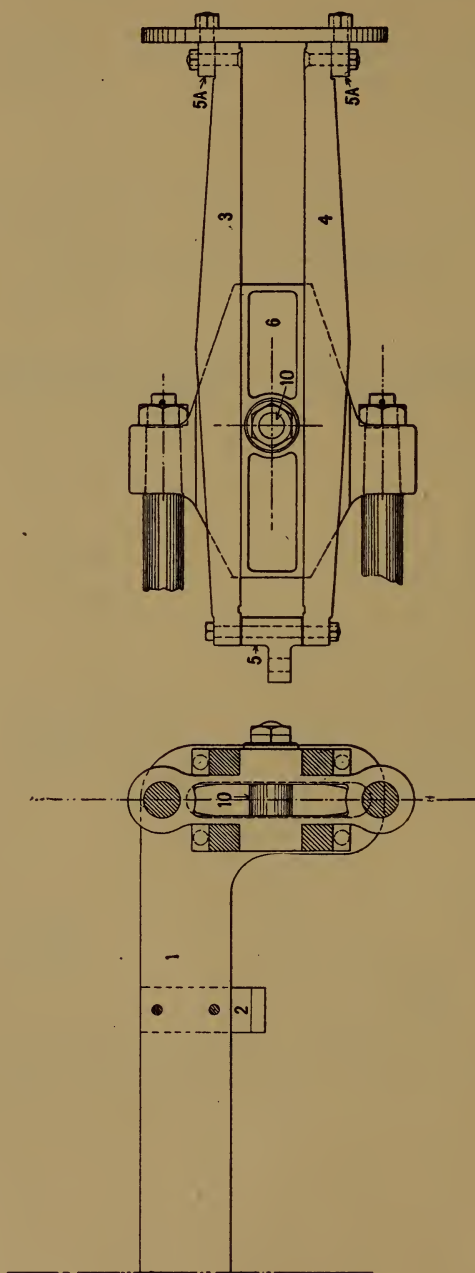
Guide Bearer, Guides, and Crosshead for Single-Expansion Locomotives

Plate 25. Endospore

Endossador . . .	1.	Guide Bearer.
Endossed . . .	2.	“ “ Knee.
Endosseras . . .	3.	Top Guide Bar.
Endossiez . . .	4.	Bottom Guide Bar.
Endosso . . .	5.	Guide Fillings.
Endostomo . . .	6.	Crosshead.
Endotheque . . .	7.	“ Gibs.
Endotric . . .	8.	“ Filling Piece.
Endotropis . . .	9.	“ Plate.
Endoudecir . . .	10.	“ Pin.
Endouzaine . . .	11.	“ Key.

Orders for guides, when not in full sets, should specify whether top or bottom guides are wanted, and for crosshead the side should be given.

Plate 26



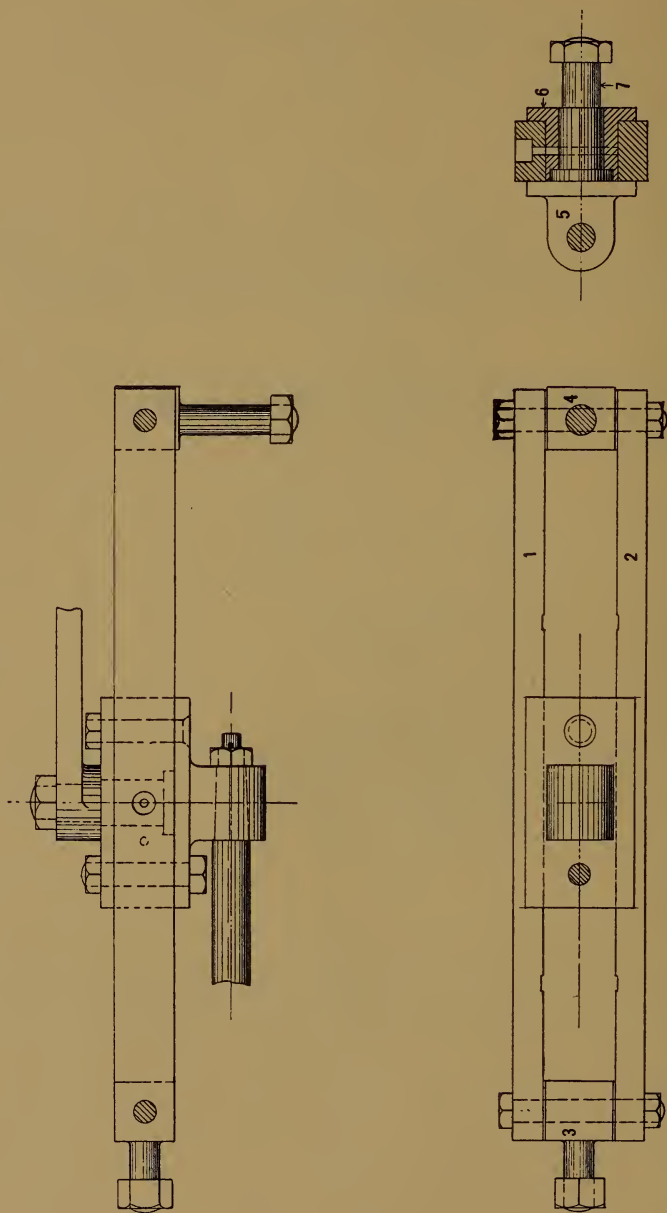
Guide Bearer, Guides, and Crosshead for Baldwin Compound Locomotives (Vauclain System)

Plate 26. Endowed

Endowing . .	1.	Guide Bearer.
Endowment . .	2.	“ “ Knee.
Endplatte . .	3.	Top Guide Bar.
Endpunkt . .	4.	Bottom Guide Bar.
Endracco . .	5.	Guide Front Filling or Block.
Endrao . . .	5A.	“ Back “ “ “
Endreim . .	6.	Crosshead.
Endressie . .	10.	“ Pin.

Orders for guides, when not in full sets, should specify whether top or bottom guides are wanted and for crosshead the side should be given.

Plate 27



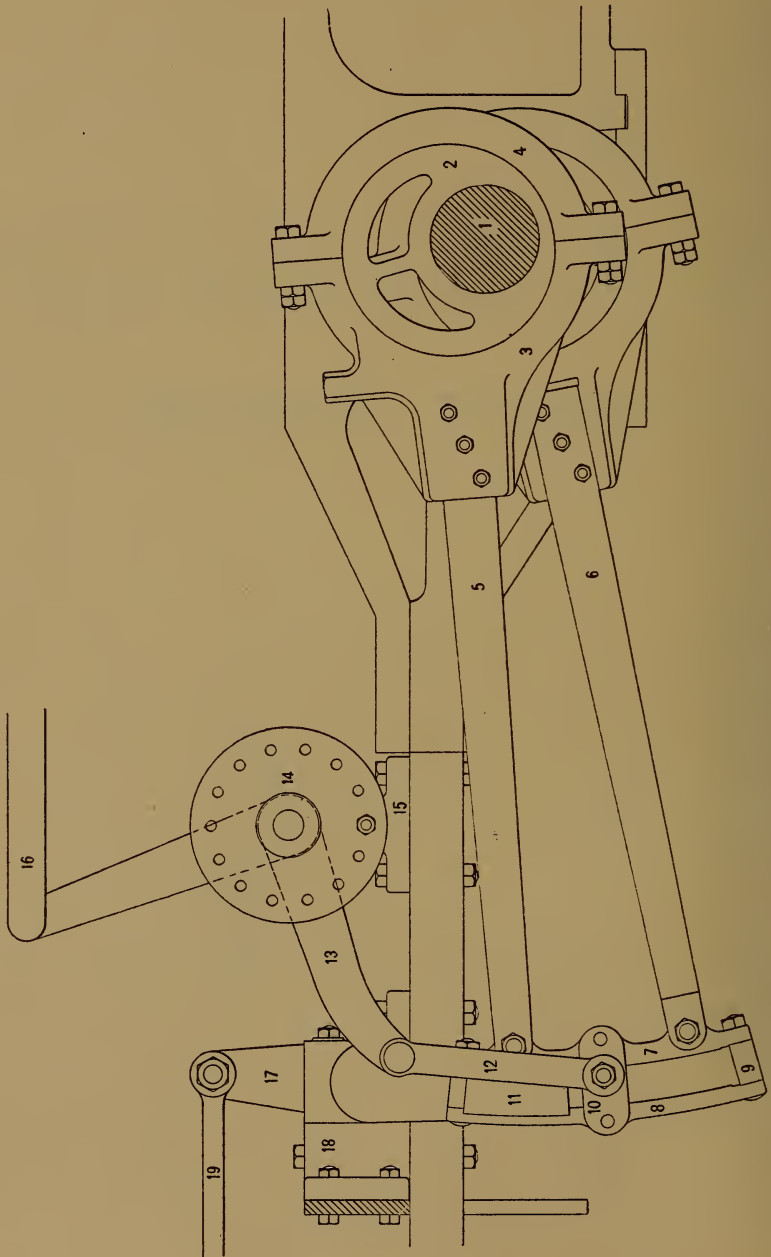
Valve Stem Guides and Crosshead for Baldwin Compound Locomotives (Vauclain System)

Plate 27. Endrevelo

Endriago	. . 1.	Valve Stem Top Guide Bar.
Endrinales	. 2.	“ “ Bottom Guide Bar.
Endrinas	. . 3.	“ “ Guide Front Filling or Block.
Endrispe	. . 4.	“ “ “ Back “ “ “
Endrivet	. . 5.	“ “ Crosshead Lug.
Endroquant	. 6.	“ “ Crosshead.
Endroguet	. . 7.	“ “ “ Pin.

Orders for valve stem guides, when not in full sets, should specify whether top or bottom guides are wanted; and for crosshead the side should be given.

Plate 28



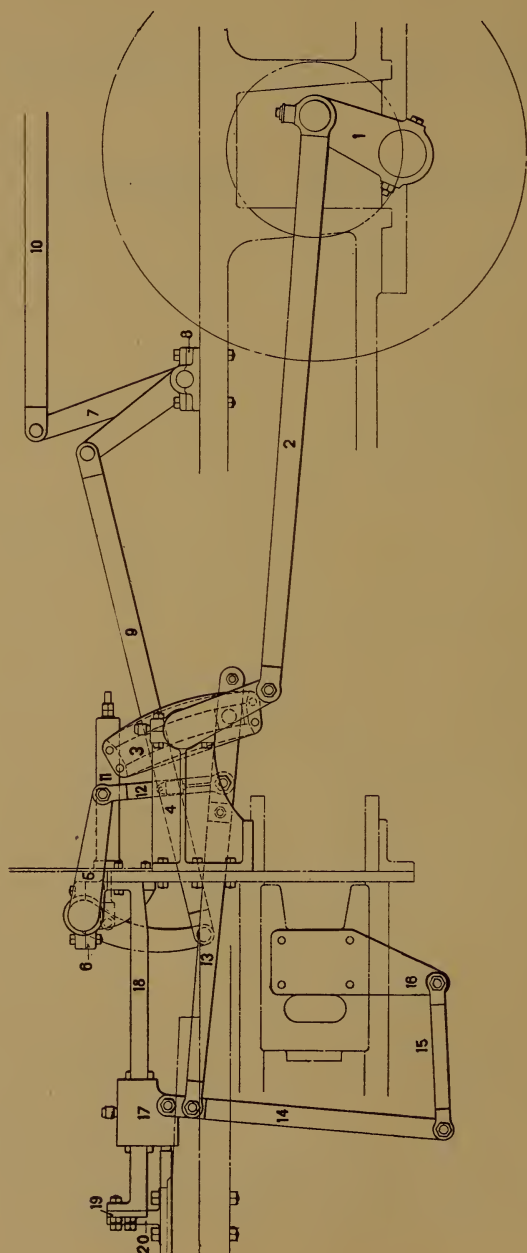
Valve Motion Work (Stephenson)

Plate 28. Endroit

Endromide . .	1.	Axle.
Endromidis . .	2.	Eccentrics.
Endrudge . .	{	3. Eccentric Strap, Front Half.
	4.	“ “ Back “
Endrudging . .	5.	“ Rod, Inside (Forward Motion).
Endschloss . .	6.	“ “ Outside (Back “).
Endsilbe . .	7.	Reverse Link, Back Half.
Endspitz . .	8.	“ “ Front “
Endstuhl . .	9.	“ “ Filling Piece.
Enduisiez . .	10.	“ “ Saddle.
Enduisions . .	11.	Sliding Block.
Endulzaban . .	12.	Link Lifter.
Endulzadas . .	13.	Reverse Shaft.
Endulzado . .	14.	Counterbalance Spring.
Endulzais . .	15.	Reverse Shaft Bearing.
Endulzemos . .	16.	“ Lever Rod.
Endulzo . . .	17.	Rock Shaft.
Endurable . .	18.	“ “ Box.
Endurais . .	19.	Valve Rod.

Orders for reverse shaft bearings, rock shaft boxes, and link work, when not in sets, should specify the side required for.

Plate 29



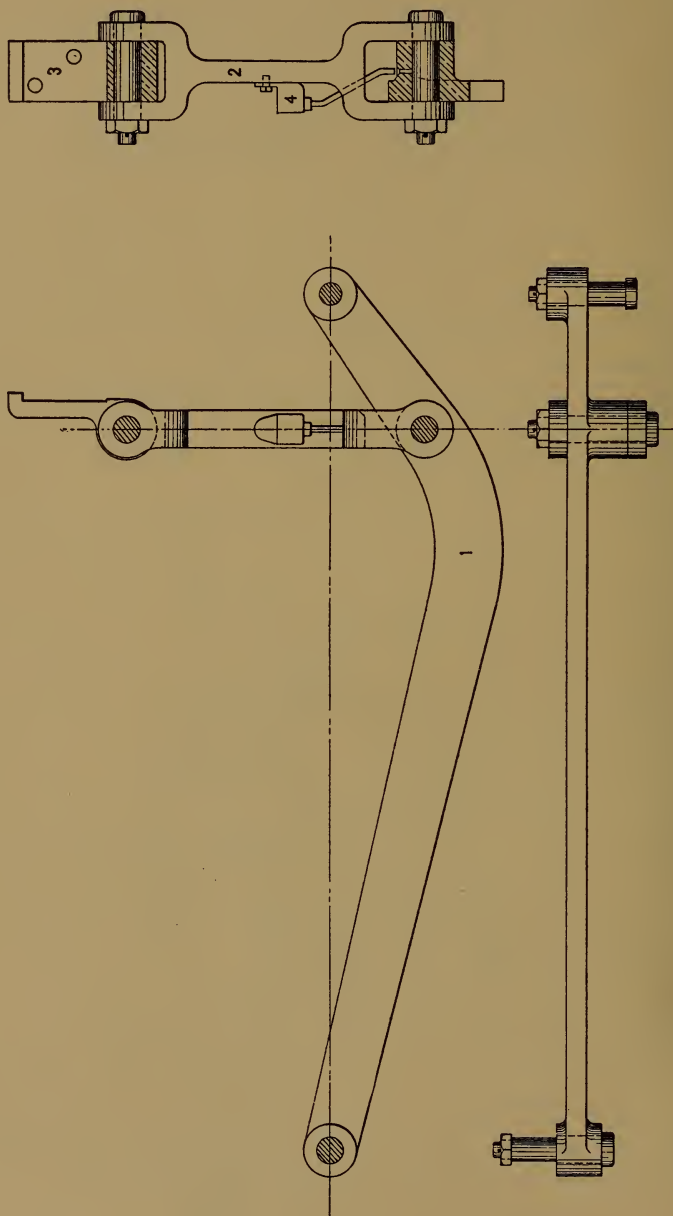
Valve Motion Work (Walschaerts)

Plate 29. Endurance

Endurant . .	1.	Eccentric Crank.
Endurcimes . .	2.	“ Rod.
Endurciras . .	3.	Link.
Endurecias . .	4.	“ Bearing.
Endurecido . .	5.	Front Reverse Shaft.
Endurentar . .	6.	“ “ “ Bearing.
Endurer . . .	7.	Back “ “
Endurezcas . .	8.	“ “ “ Bearing.
Endurezco . .	9.	Front Reverse Lever Rod.
Enduring . .	10.	Back “ “ “
Enduringly . .	11.	Counterbalance Spring.
Endurons . .	12.	Lifting Link.
Endways . .	13.	Radius Rod.
Endwise . .	14.	Combination Lever.
Endyalite . .	15.	“ “ Link.
Endymion . .	16.	Crosshead Plate.
Endymionem . .	17.	Valve Yoke Crosshead.
Endymionis . .	18.	“ “ Guide.
Endytis . . .	19.	“ “ “ Crosstie.
Endzapfen . .	20.	“ “ “ “ Knee.

Orders for reverse shaft bearings, link bearings and valve motion work, when not in sets, should specify the side required for.

Plate 30



Rock Shaft Rod and Hanger

Plate 30. Endziel

Endzweck . . .	1.	Rock Shaft Rod.
Eneacordio . . .	2.	“ “ “ Hanger.
Eneadas . . .	3.	“ “ “ “ Bearing.
Eneaginas . . .	4.	“ “ “ Oil Cup.

Orders for rock shaft rods, hangers, and bearings, when not in sets, should specify the side required for.

Plate 31

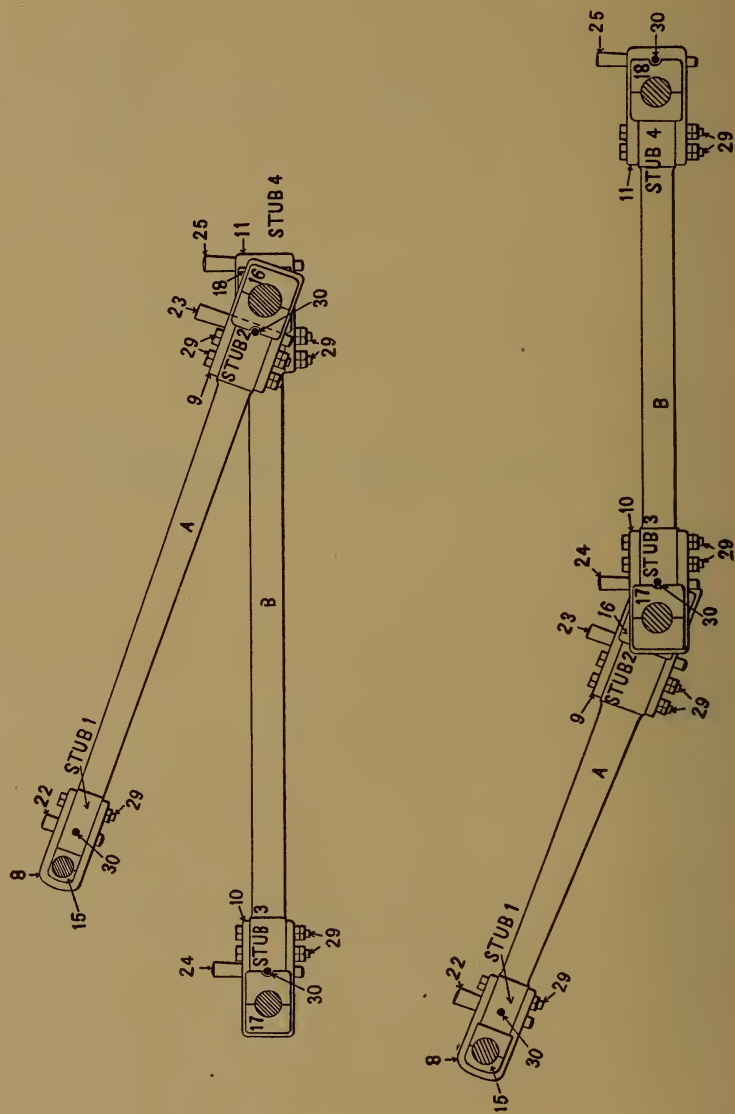
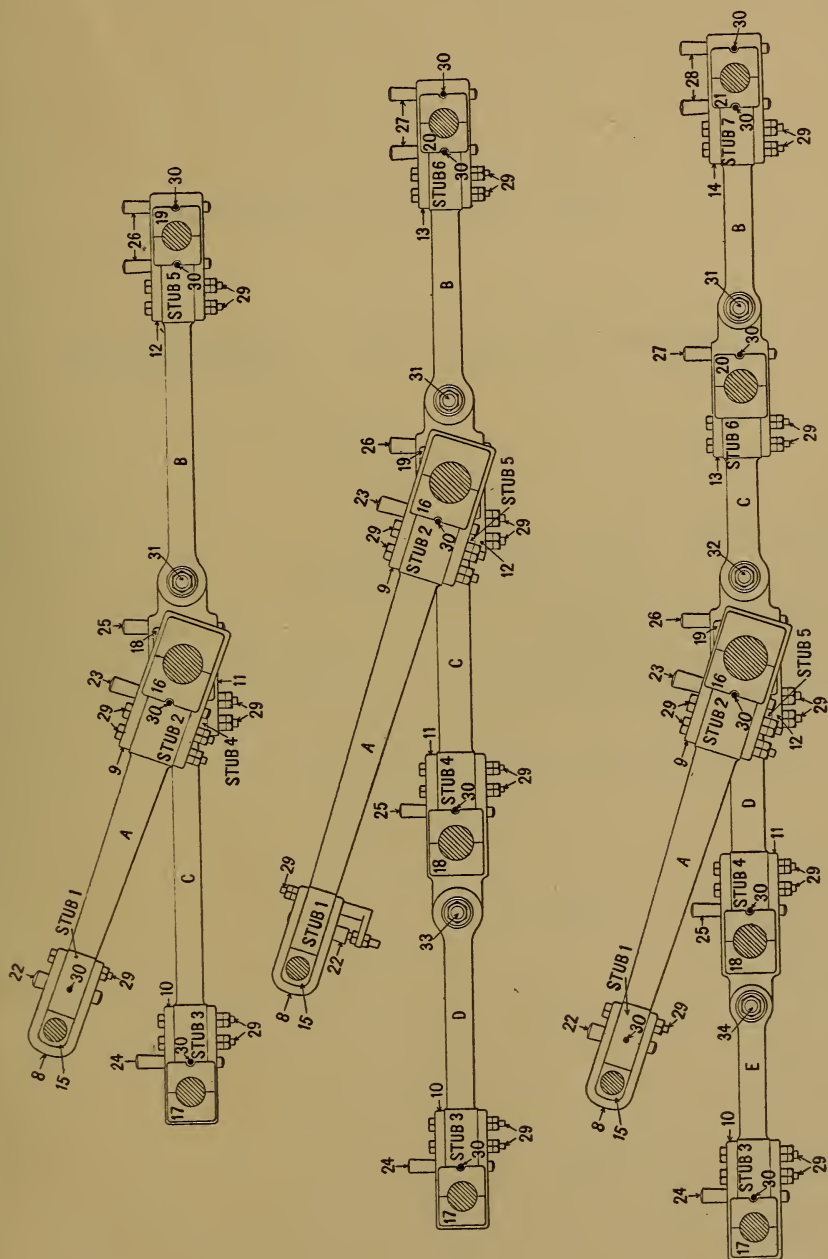


Plate 32



Rods, Straps and Brasses

Plates 31 and 32. Eneagona

Eneagonos	. A.	Main Rod.				
Eneandria	. . B.	Back Parallel or Side Rod.				
Enebral	. . . C.	Second	"	"	"	"
Enebrinas	. . D.	Third	"	"	"	"
Enebros	. . . E.	Fourth	"	"	"	"

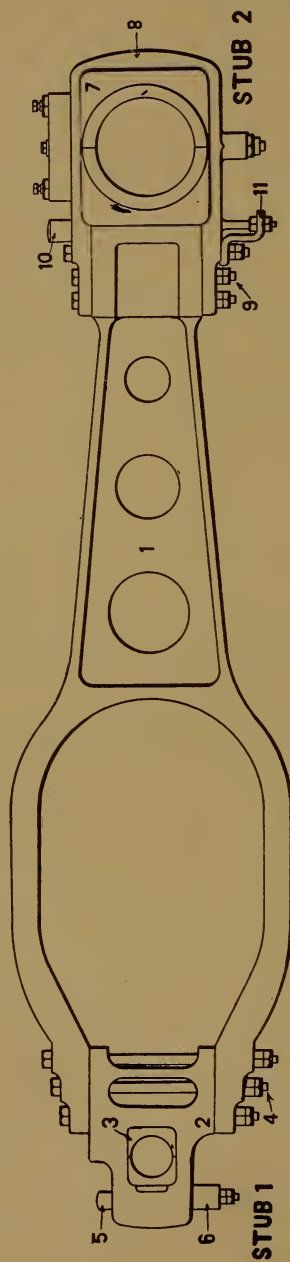
Enecabamus	8.	Strap of Stub	1.			
Enecandos	. 9.	"	"	"	"	2.
Enecantium	. 10.	"	"	"	"	3.
Enecaremus	. 11.	"	"	"	"	4.
Enecate	. . 12.	"	"	"	"	5.
Enecating	. . 13.	"	"	"	"	6.
Enecatrici	. . 14.	"	"	"	"	7.
Enecatrix	. . 15.	Brass	"	"	"	1.
Enecia	. . 16.	"	"	"	"	2.
Enecturam	. 17.	"	"	"	"	3.
Enecturi	. . 18.	"	"	"	"	4.
Enecturos	. . 19.	"	"	"	"	5.

Enecuerdo . . .	20.	Brass of Stub	6.
Enecuerunt . . .	21.	" " "	7.
Enedreyte . . .	22.	Key " "	1.
Eneida . . .	23.	" " "	2.
Eneldos . . .	24.	" " "	3.
Eneleo . . .	25.	" " "	4.
Enematibus . . .	26.	" " "	5.
Enemion . . .	27.	" " "	6.
Enemistado . . .	28.	" " "	7.
Enemistas . . .	29.	Bolt.	
Enemitique . . .	30.	Set Screw.	
Enenkel . . .	31.	Jaw Pin for B.	
Eneoptere . . .	32.	" " "	C.
Eneorema . . .	33.	" " "	D.
Energema . . .	34.	" " "	E.

When rods are not ordered in full sets, the side for which the parts are wanted should be given, as well as the letter of the rod and the stub number.

Give the stub number in all cases when ordering straps, brasses, keys, bolts, or set screws.

Plate 33



Inside Connecting Rod for Balanced Compound Locomotives

Plate 33. Energemati

Energetico	. 1.	Rod Body.
Energical	. . . 2.	Front Stub.
Energiche	. . 3.	" " Brass.
Energizar	. . 4.	" " Bolts.
Energizing	. 5.	" " Key.
Energumeno	6.	" " " Washer.
Energy	. . . 7.	Back Stub Brass.
Enero 8.	" " Strap.
Enervabais	. 9.	" " Bolts.
Enervabunt	. 10.	" " Key.
Enervacao	. 11.	" " " Holder.

Plate 34

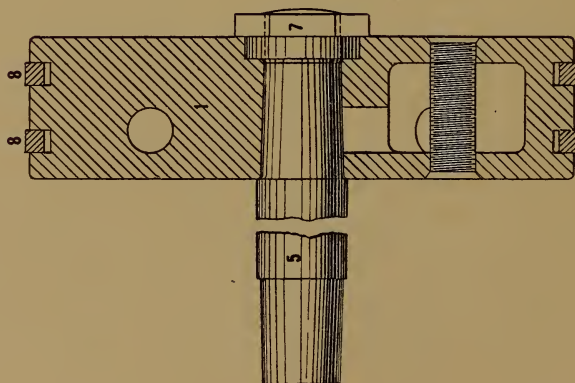


Fig. 1

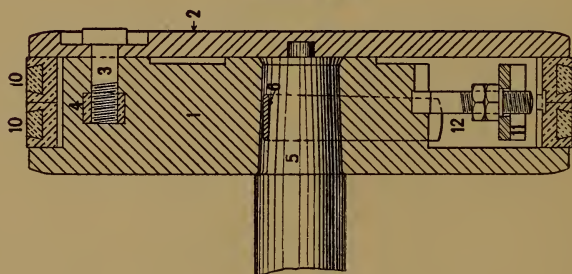


Fig. 2

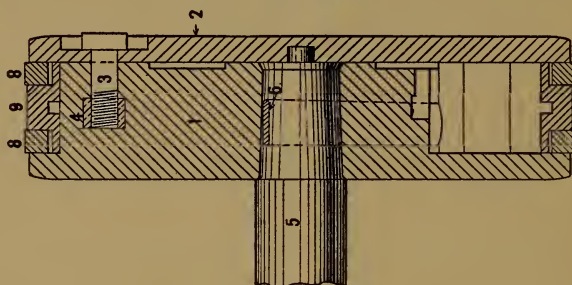


Fig. 3

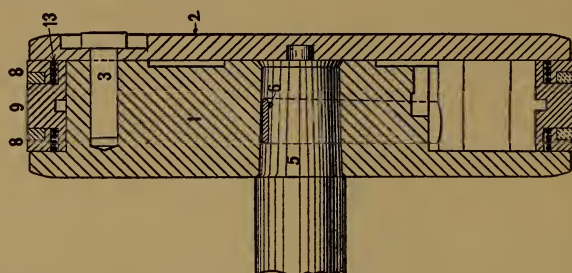


Fig. 4

Pistons and Packing Rings

Plate 34. Enervador

Enervais . .	1.	Piston Head.
Enervamos . .	2.	" Follower.
Enervant . .	3.	" " Bolts.
Enervaron . .	4.	" " Bolt Nuts.
Enervasses . .	5.	" Rod.
Enervative . .	6.	" " Key.
Enervaturo . .	7.	" " Nut.
Enervavero . .	8.	" Spring Rings (Cast Iron).
Enervement . .	9.	" T Ring (Cast Iron).
Enerverais . .	10.	" Brass and Composition Rings.
Enerveront . .	11.	" Spring.
Enervibus . .	12.	" " Studs and Nuts.
Enerviez . .	13.	" Wire Springs.

This plate indicates four kinds of packing generally used, and customers can readily refer to the particular pieces by the number of the piece, as well as the figure number.

Plate 35

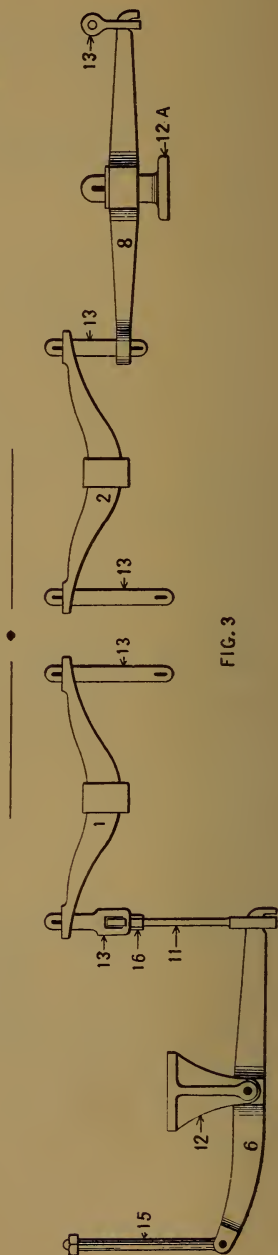
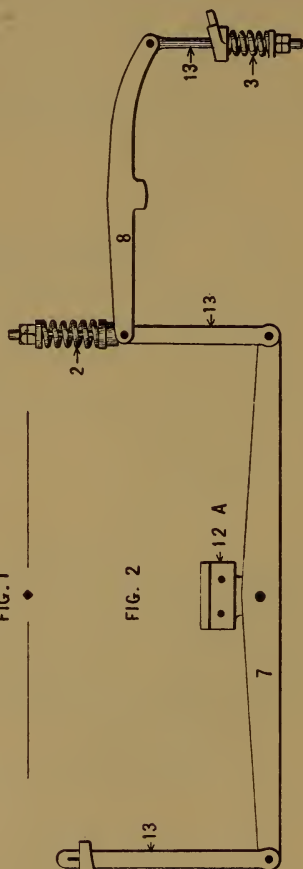
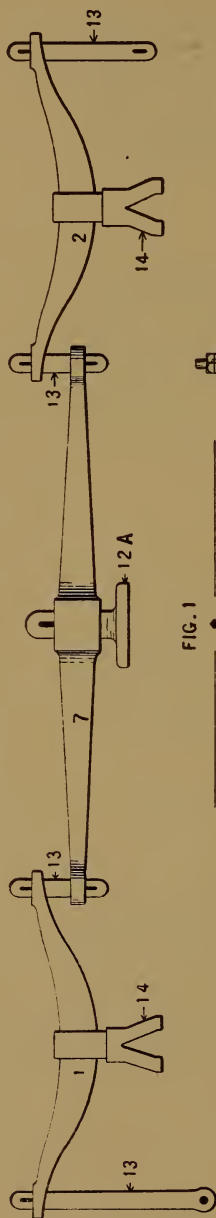


Plate 36

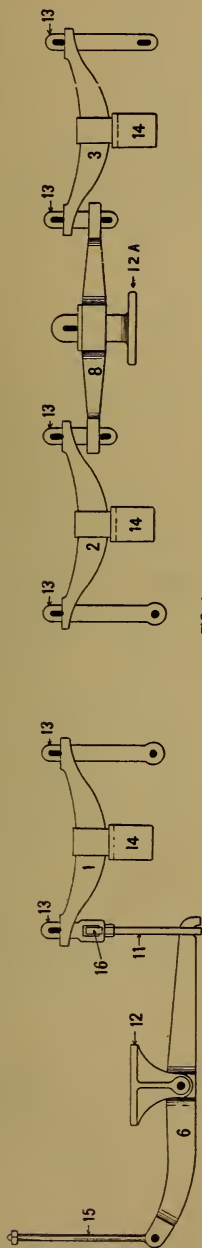


FIG. 4

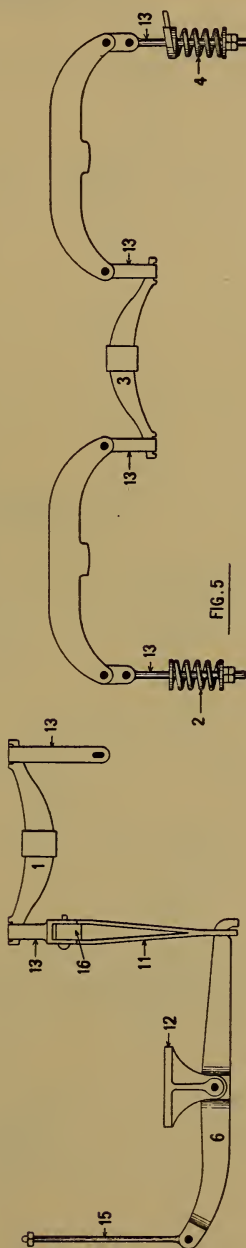


FIG. 5

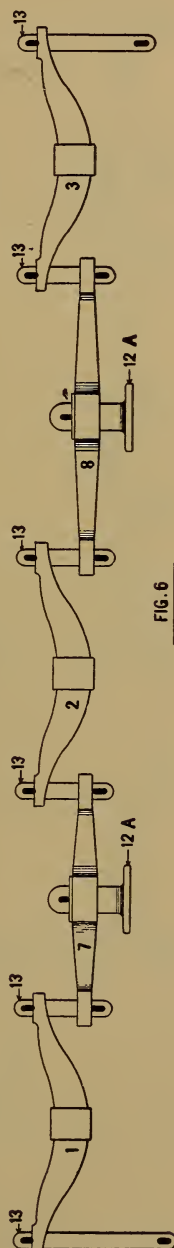
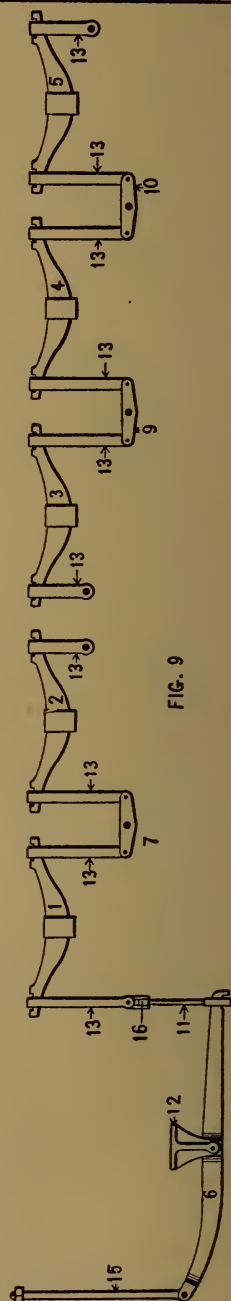
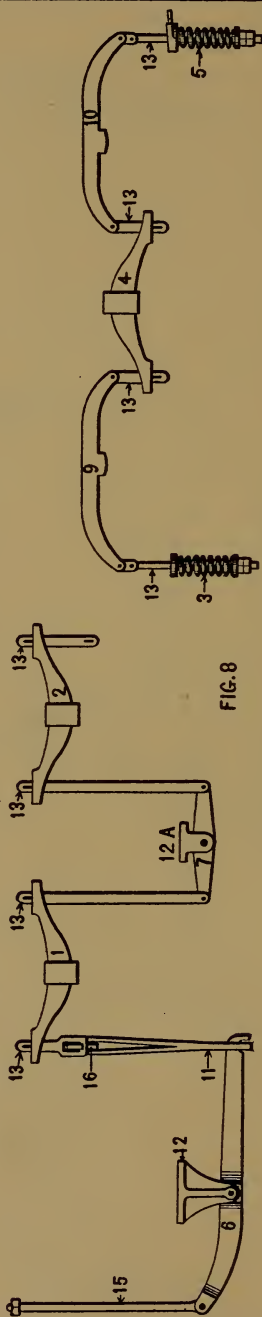
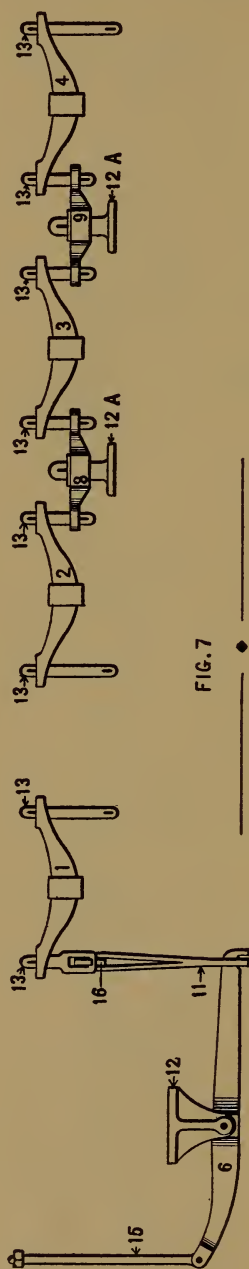


FIG. 6

Plate 37



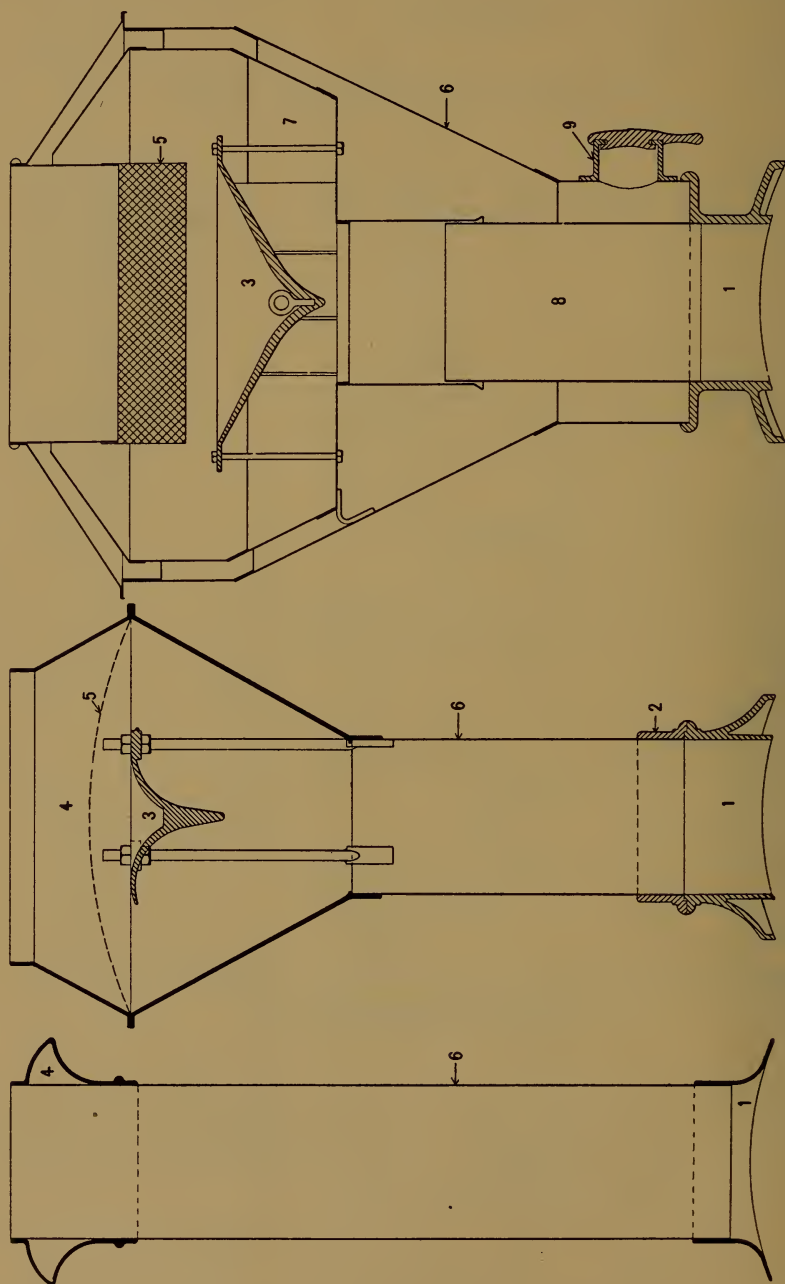
Springs and Equalizing Work

Plates 35, 36 and 37. Enervons

Enervorum	. 1.	Forward Driving Spring.
Eneti 2.	Second " "
Eneyer	. . . 3.	Third " "
Enfadadas	. 4.	Fourth " "
Enfadadico	. 5.	Fifth " "
Enfadando	. 6.	Forward Truck Equalizing Beam.
Enfadarian	. 7.	Driving Equalizing Beam, First.
Enfadeis	. . 8.	" " " Second.
Enfaddonho	. 9.	" " " Third.
Enfagoter	. . 10.	" " " Fourth.
Enfaixar	. . 11.	Forward " " Link.
Enfaldada	. . 12.	" " " Fulcrum.
Enfaldador	. 12A.	Driving " " "
Enfaldamos	. 13.	" Spring Link.
Enfaldare	. . 14.	" " Staple.
Enfaldaron	. 15.	Forward Truck Center Pin Bolt.
Enfamar	. . 16.	Transverse Equalizing Beam.

In ordering from these plates, it is necessary to specify the figure as well as the number of piece, as it will be noticed that the same numbers have different shapes on the different figures.

Plate 38



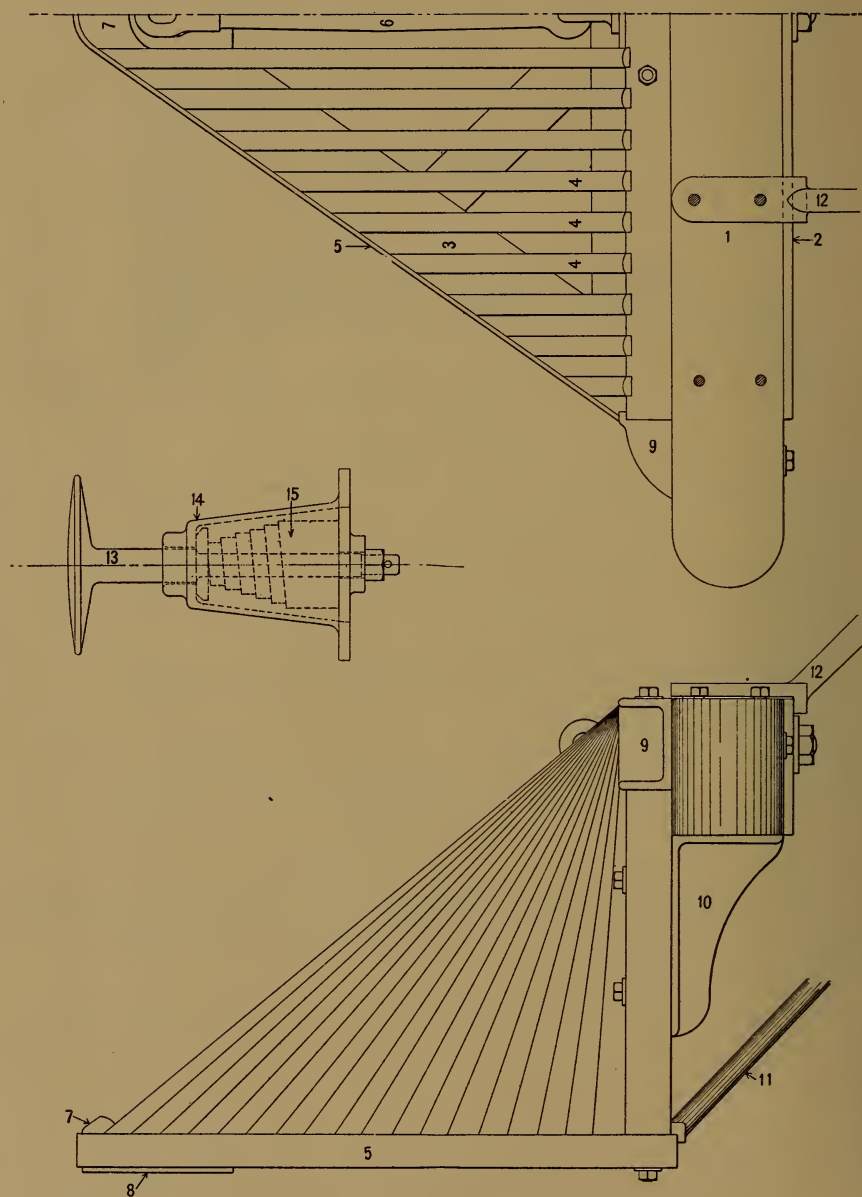
Smoke Stacks

Plate 38. Enfamined

-
- Enfamished . 1. Base.
Enfancon . . 2. “ Flange.
Enfangada . 3. Cone.
Enfangados . 4. Top.
Enfangueis . 5. Netting.
Enfardaras . 6. Body.
Enfardasen . 7. Chamber.
Enfardelo . . 8. Inside Pipe.
Enfarelar . . 9. Hand Hole and Plate.

In ordering top parts of “Diamond” plan of stack, the order should always specify whether top or bottom part of No. 4 is wanted when both pieces are not required.

Plate 39



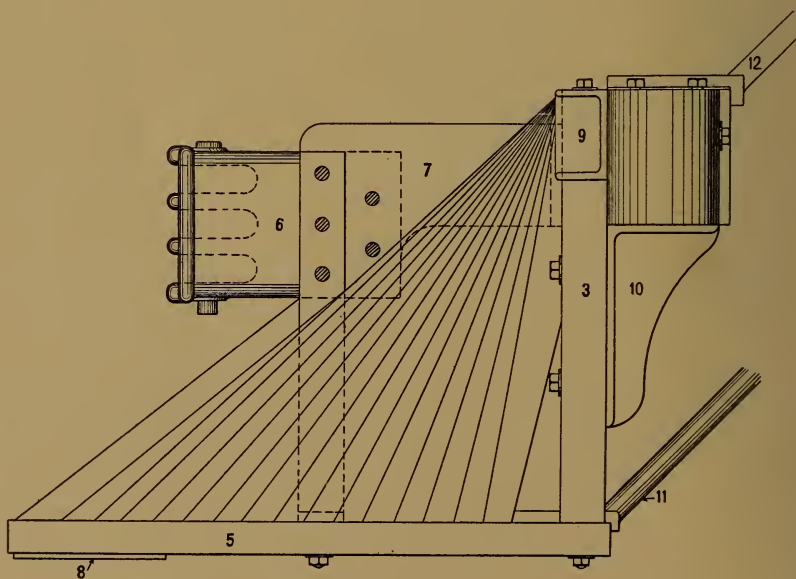
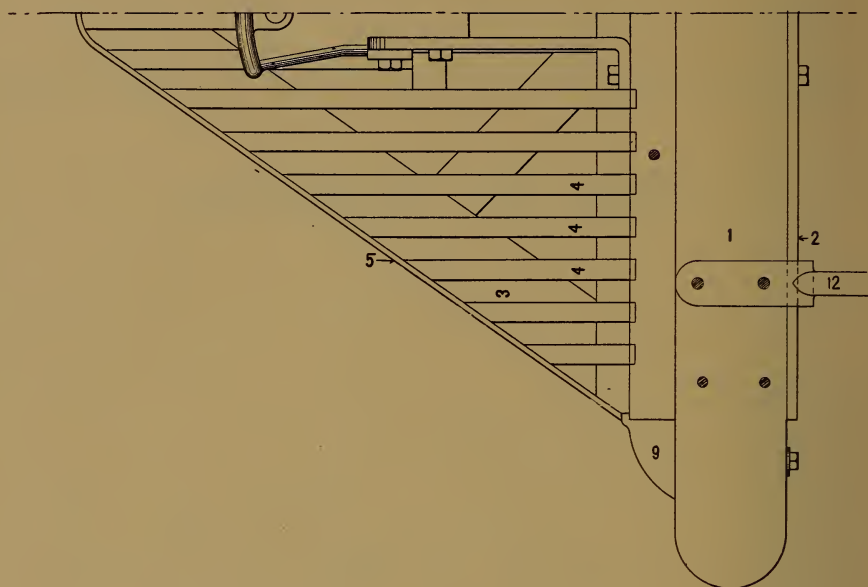
Pilot and Front Bumper, Iron Draw Bar Attachment

Plate 39. Enfarinait

Enfarinhar . . .	1.	Bumper.
Enfarinons . . .	2.	Stiffening Plate.
Enfascie . . .	3.	Pilot Frame.
Enfastiado . . .	4.	“ Bars.
Enfatiche . . .	5.	“ Bottom Band.
Enfatico . . .	6.	Draw Bar.
Enfatilhar . . .	7.	“ “ Shoe.
Enfects . . .	8.	Bottom Plate.
Enfeeble . . .	9.	Pushing Shoe.
Enfeebling . . .	10.	Pilot Bracket.
Enfeeblish . . .	11.	Middle Brace.
Enfeitador . . .	12.	Smokebox Brace.
Enfeiticar . . .	13.	Spring Buffer.
Enfelon . . .	14.	“ “ Case.
Enfeloned . . .	15.	“ “ Spring.

The bracket No. 10 is made right and left, and when only one is wanted the side required for should be specified.

Plate 40



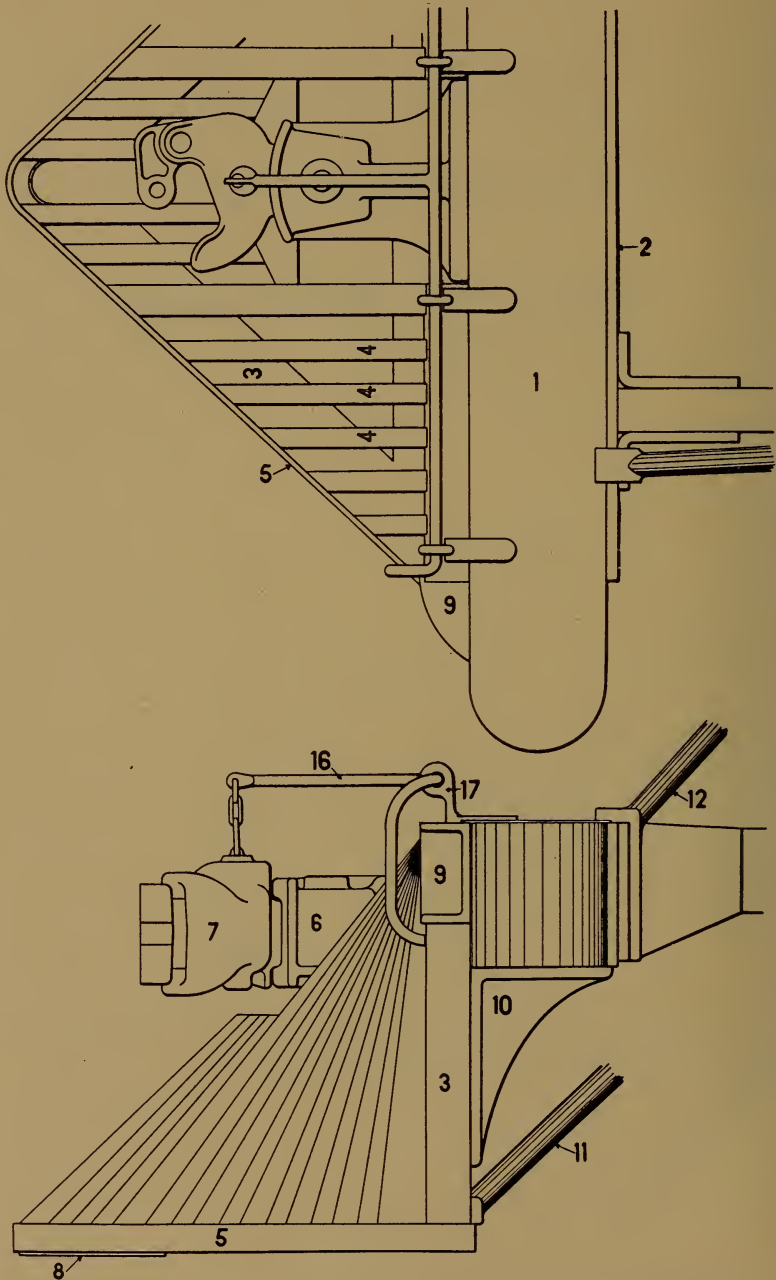
Pilot and Front Bumper, Bull Nose Attachment

Plate 40. Enfeloning

Enfelujar . . .	1. Bumper.
Enfeoff . . .	2. Stiffening Plate.
Enfeoffed . . .	3. Pilot Frame.
Enfeoffing . . .	4. " Bars.
Enfermaban . . .	5. " Bottom Band.
Enfermados . . .	6. " Draw Casting.
Enfermames . . .	7. " " " Support.
Enfermar . . .	8. Bottom Plate.
Enfermaria . . .	9. Pushing Shoe.
Enfermedad . . .	10. Pilot Bracket.
Enfermeiro . . .	11. Middle Brace.
Enfermiez . . .	12. Smokebox Brace.

The bracket No. 10 is made right and left, and when only one is wanted the side required for should be specified.

Plate 41



Pilot and Front Bumper, Automatic Coupler

Plate 41. Enfermizas

Enfermizo . . .	1. Bumper.
Enfermons . . .	2. Stiffening Plate.
Enfernizar . . .	3. Pilot Frame.
Enferonner . . .	4. " Bars.
Enferrure . . .	5. " Bottom Band.
Enfesta . . .	6. " Draw Casting.
Enfettered . . .	7. Pilot Automatic Coupler.
Enfeudacao . . .	8. Bottom Plate.
Enfevered . . .	9. Pushing Shoe.
Enfevering . . .	10. Pilot Bracket.
Enfezado . . .	11. Middle Brace.
Enfiada . . .	12. Smokebox Brace.
Enfiadura . . .	16. Coupling Pin Lifter.
Enfiamento . . .	17. " " " Bearing.

The bracket No. 10 is made right and left, and when only one is wanted the side required for should be specified.

Plate 42

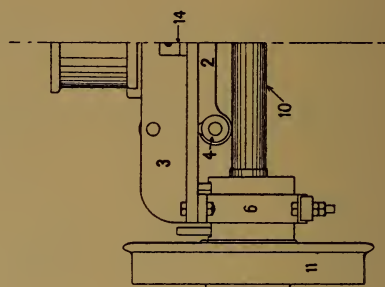
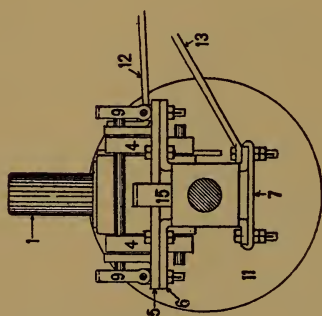
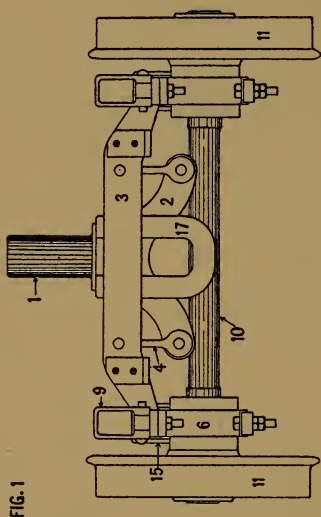
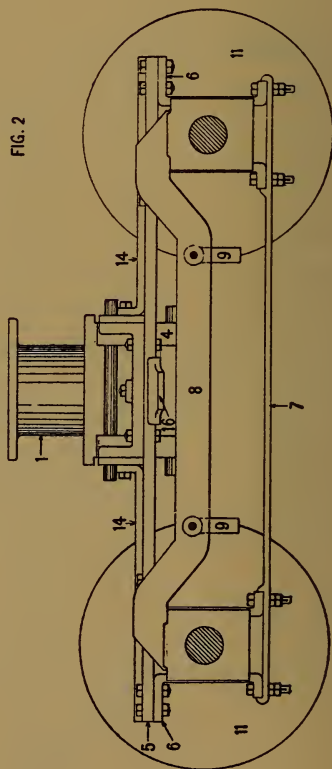


FIG. 2



Engine Trucks

Plate 42. Enfiando

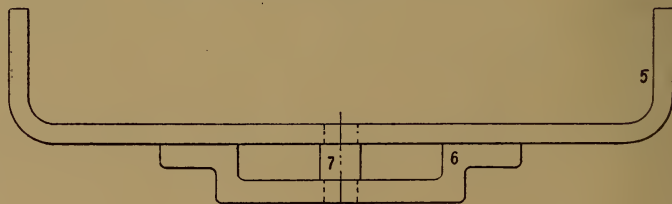
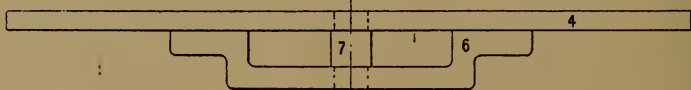
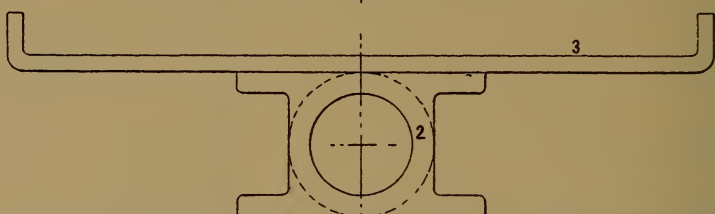
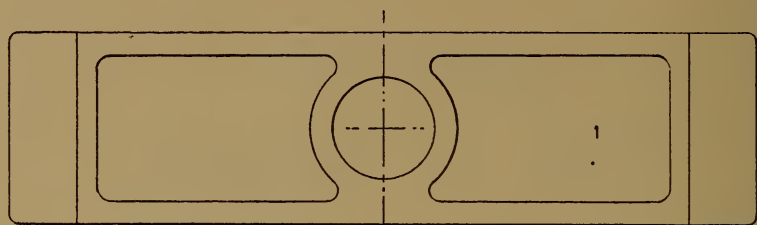
Enfiarono . . FIG. 1.—Two Wheeled or Pony Truck.

Enfiassimo . FIG. 2.—Four Wheeled Truck.

- Enfiatello . . 1. Center Pin.
 Enfiativo . . 2. Swing Bolster.
 Enfiatuzzo . 3. “ “ Crosstie.
 Enfiavamo . 4. “ “ Link.
 Enfiavate . . 5. Truck Frame.
 Enfiazione . 6. “ Pedestal.
 Enficeler . . 7. “ “ Cap.
 Enfieranno . 8. Equalizing Beam.
 Enfierced . . 9. Spring Link.
 Enfiercing . 10. Axle.
 Enfierebbe . 11. Wheel.
 Enfieremo . . 12. Radius Bar.
 Enfieresti . 13. “ “ Brace.
 Enfiero . . . 14. Longitudinal “
 Enfievrait . 15. Spring Staple.
 Enfievriez . 16. “ Seat.
 Enfievront . 17. Safety Strap.

This plate embodies both the pony and ordinary four wheel truck, and in ordering parts by the designating numbers the figure number should first be given.

Plate 43



Engine Truck Center Pin Guide and Crosstie;
Radius Bar Crosstie and Clamp

Plate 43. Enfiladed

Enfilading . . . 1.	Engine Truck Center Pin Guide.
Enfilado . . . 2.	“ “ “ “ “
Enfilais . . . 3.	“ “ “ “ “ Crosstie.
Enfilamos . . . 4.	“ “ Radius Bar Crosstie.
Enfilant . . . 5.	“ “ “ “ “
Enfilasses . . . 6.	“ “ “ “ Clamp.
Enfileirar . . . 7.	“ “ “ “ Pin.

Plate 44

FIG. 2

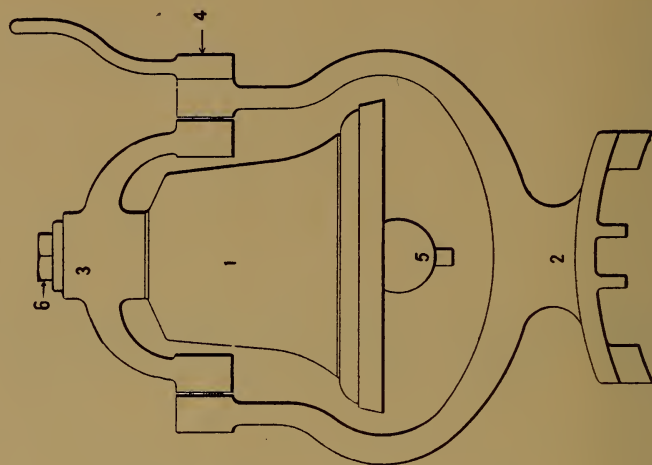
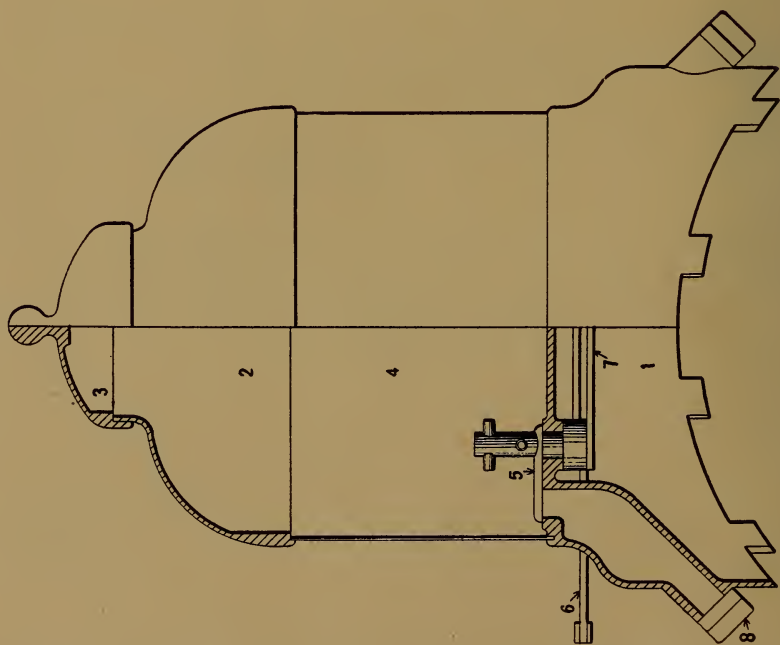


FIG. 1



Sand Box and Bell Work

Plate 44. Enfilerais

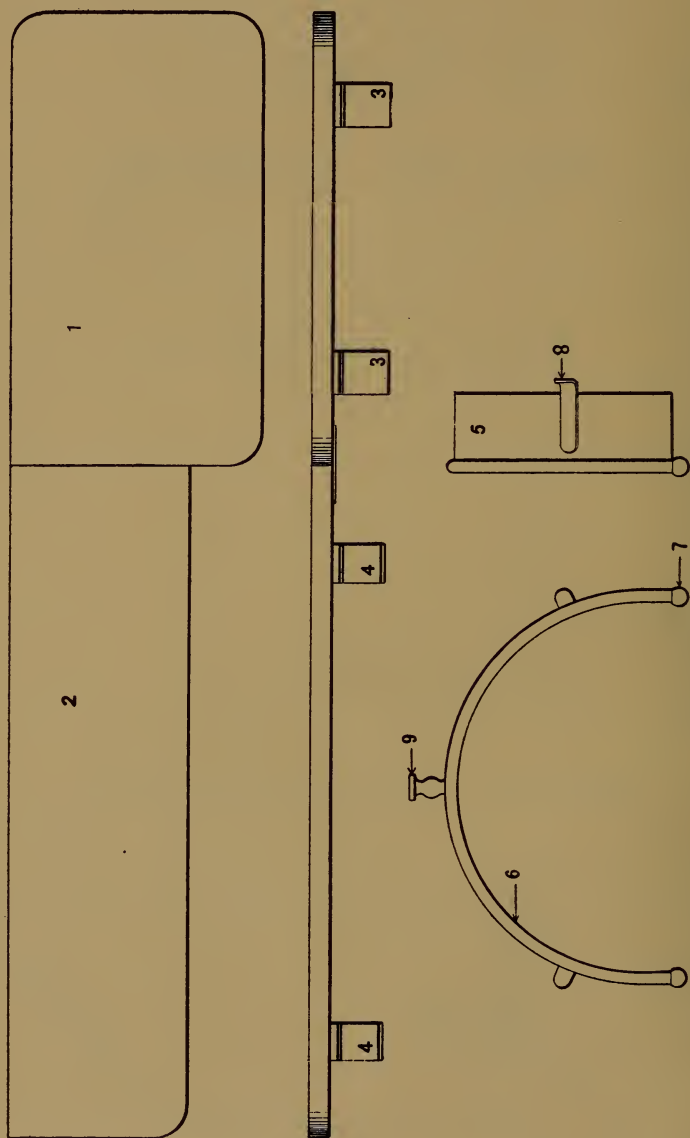
Enfiliez . . . FIG. 1.—Sand Box.

- Enfilons . . . 1. Base.
- Enfiring . . . 2. Top.
- Enfisema . . . 3. Lid.
- Enfitar . . . 4. Body.
- Enfiteusis . . . 5. Valve.
- Enfiteuta . . . 6. Lever.
- Enfivelar . . . 7. Valve Connecting Rod.
- Enflais . . . 8. Pipe Flange.

Enflammit . . . FIG. 2.—Bell and Frame.

- Enflaquer . . . 1. Bell.
- Enflautado . . . 2. Frame.
- Enflautar . . . 3. Yoke.
- Enflauteis . . . 4. Crank.
- Enflauto . . . 5. Tongue.
- Enflerez . . . 6. Acorn.

Plate 45



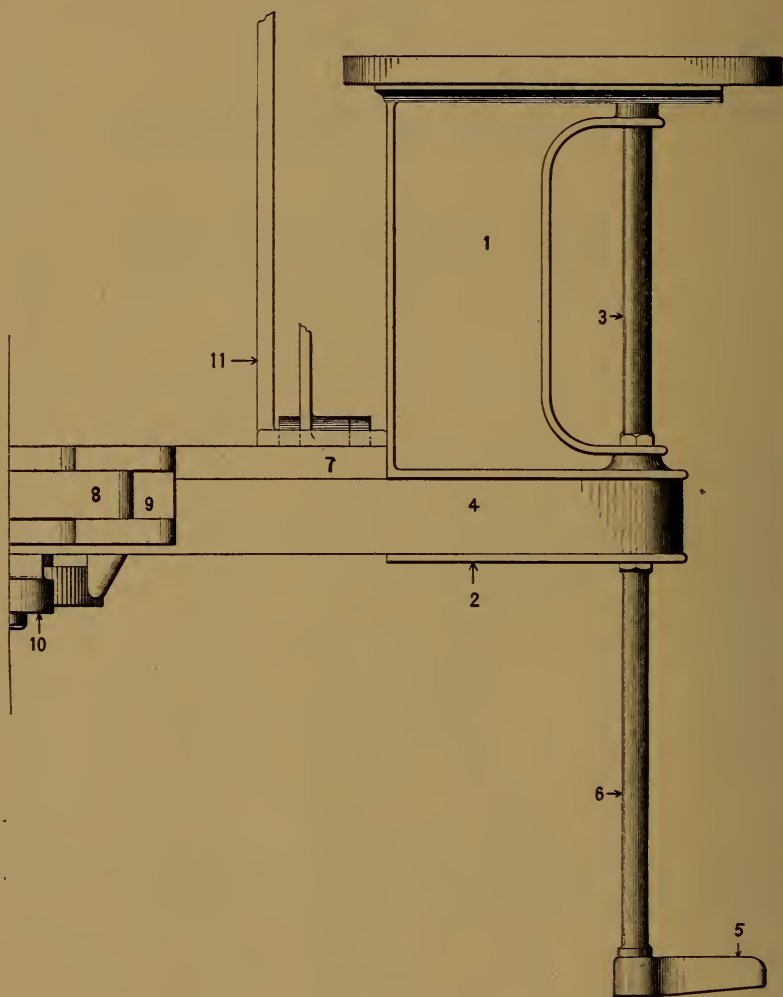
Foot Boards and Wheel Covers

Plate 45. Enfleront

Enfleshed . .	1.	Cab Foot Board.	
Enfleshing . .	2.	Running	"
Enfleurant . .	3.	Cab Foot	" Brackets.
Enfleuri . . .	4.	Running	" "
Enflorar . . .	5.	Wheel Cover.	
Enflowered . .	6.	" "	Pipe.
Enfogado . . .	7.	" "	Acorn.
Enfoliates . .	8.	" "	Bracket.
Enfolier . . .	9.	" "	Column.

These parts are seldom ordered except in full sets, and the side wanted for should be given when they are not so ordered.

Plate 46



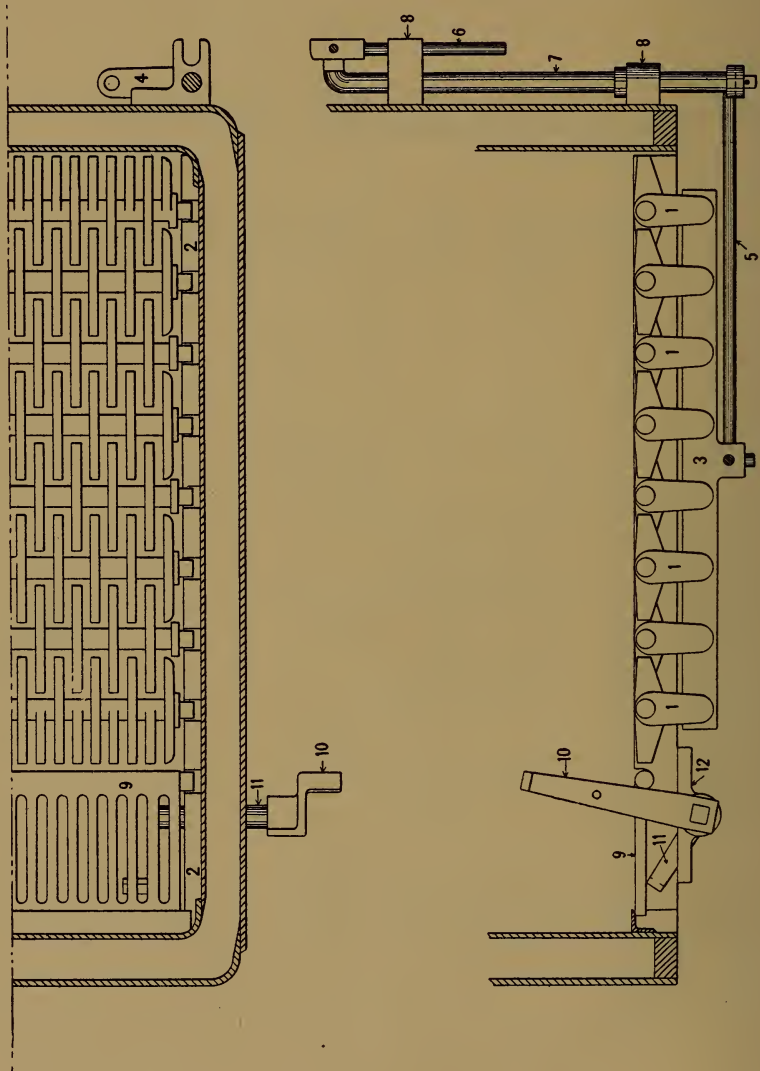
Back Bumper and Attachments

Plate 46. Enfoncage

Enfoncais . .	1.	Cab Bracket.
Enfonceur . .	2.	“ “ Plate.
Enforcedly . .	3.	“ “ Pipe.
Enforcing . .	4.	Back Bumper.
Enforciras . .	5.	Engine Step.
Enforcive . .	6.	“ “ Hanger.
Enformacao . .	7.	Foot Plate.
Enforms . .	8.	Tender Wedge.
Enfortuned . .	9.	“ “ Box.
Enfouimes . .	10.	Back Draw Bar.
Enfouining . .	11.	“ Brace.

Cab brackets are made right and left. Orders for single brackets should give side wanted for.

Plate 47



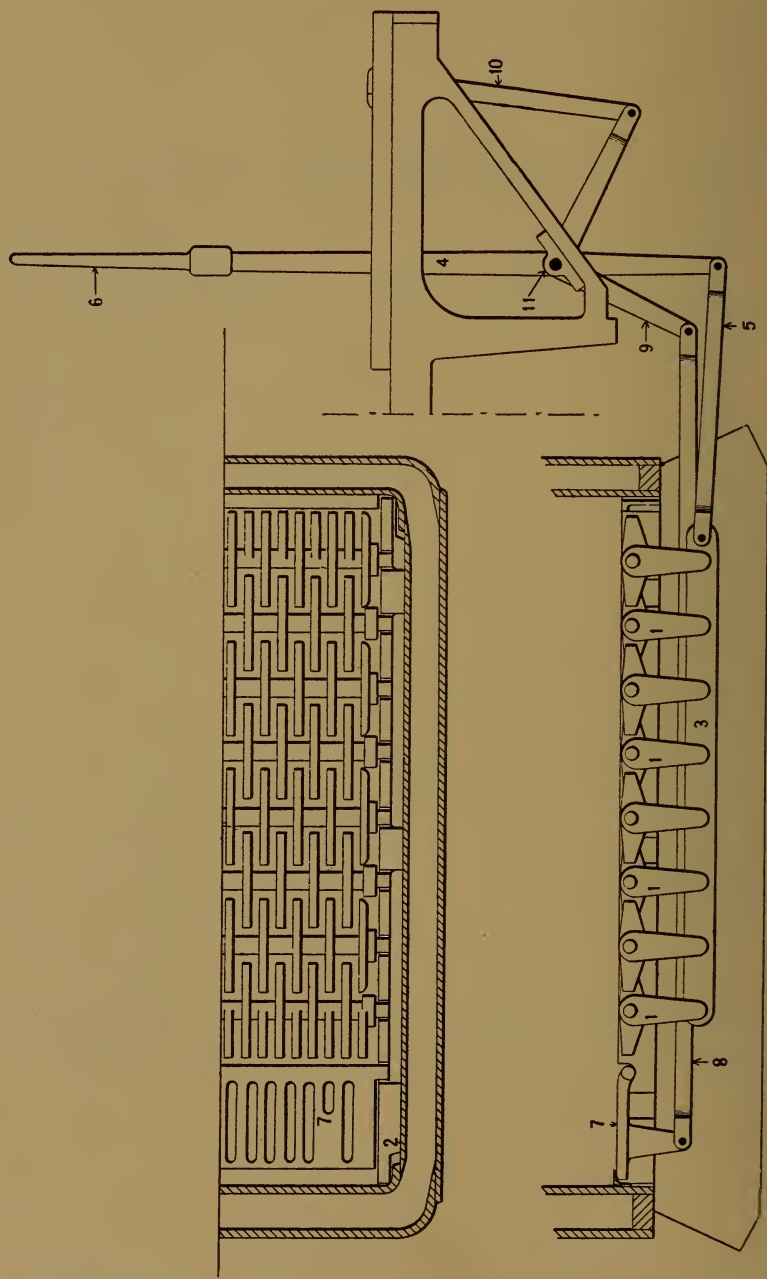
Rocking Grate Work

Plate 47. Enfouir

Enfouiras . .	1.	Bar.
Enfouiriez . .	2.	Frame.
Enfouiront . .	3.	Connecting Bar.
Enfourchi . .	4.	Arm.
Enfournait . .	5.	Rod.
Enfournons . .	6.	Handle.
Enfourrer . .	7.	Shaft.
Enfraile . . .	8.	“ Bearings.
Enfranger . .	9.	Drop Plate.
Enfrasques . .	10.	“ “ Handle.
Enfrassia . .	11.	“ “ Shaft.
Enfratico . .	12.	“ “ “ Bearing.

When complete sets of these bars are not wanted, the order should give the position from the front of the bars that are required.

Plate 48



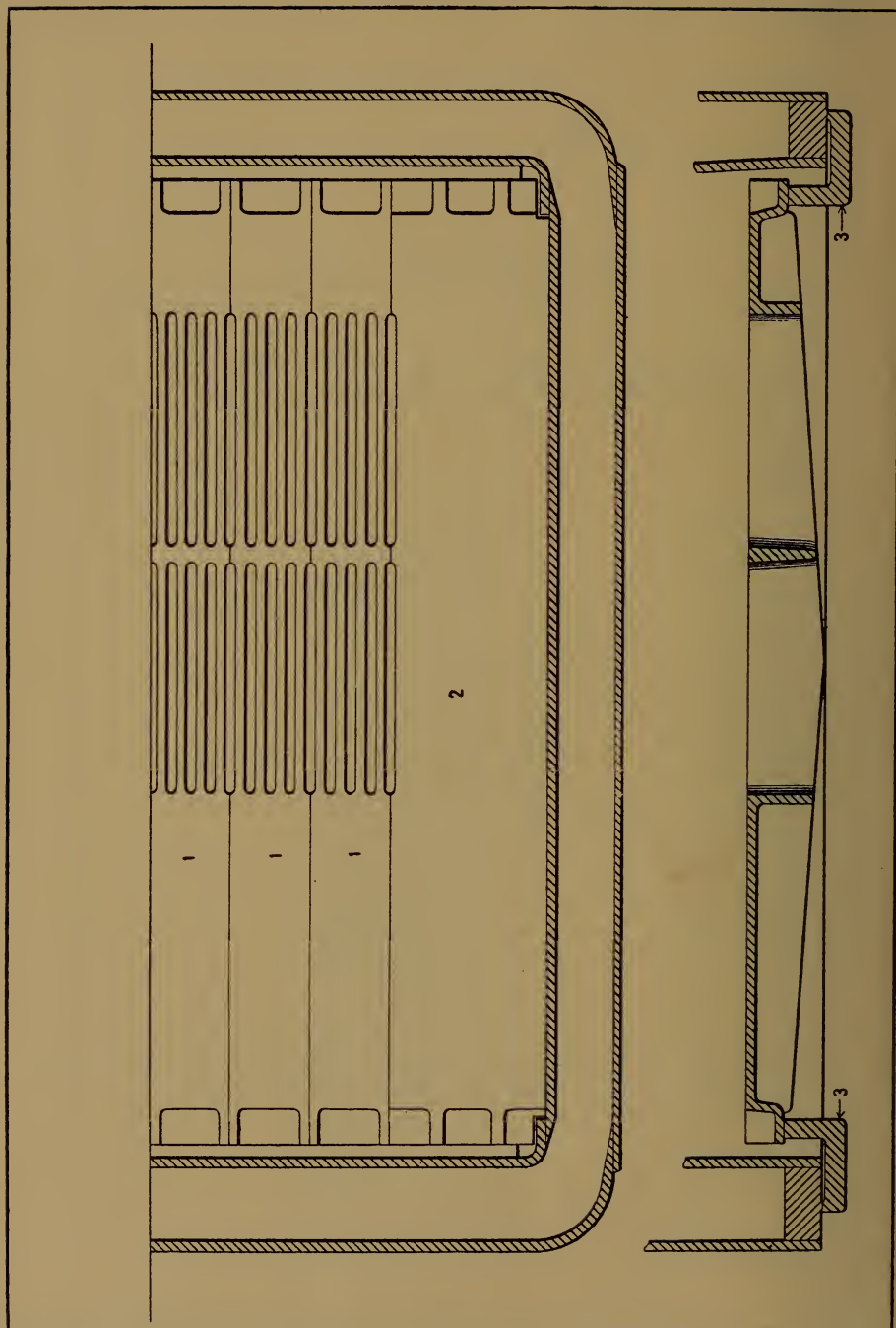
Rocking Grate Work

Plate 48. Enfreador

Enfrear . . .	1.	Bar.
Enfreedom . .	2.	Frame.
Enfrenaba . .	3.	Connecting Bar.
Enfrenases . .	4.	Lever.
Enfrestado . .	5.	“ Rod.
Enfriabais . .	6.	“ Handle.
Enfriadera . .	7.	Drop Plate.
Enfriado . . .	8.	“ “ Rod.
Enfriamos . .	9.	“ “ Crank.
Enfriarian . .	10.	“ “ “ Handle.
Enfriaron . .	11.	“ “ “ Bearing.

When complete sets of these bars are not wanted, the order should give the position from the front of the bars that are required.

Plate 49



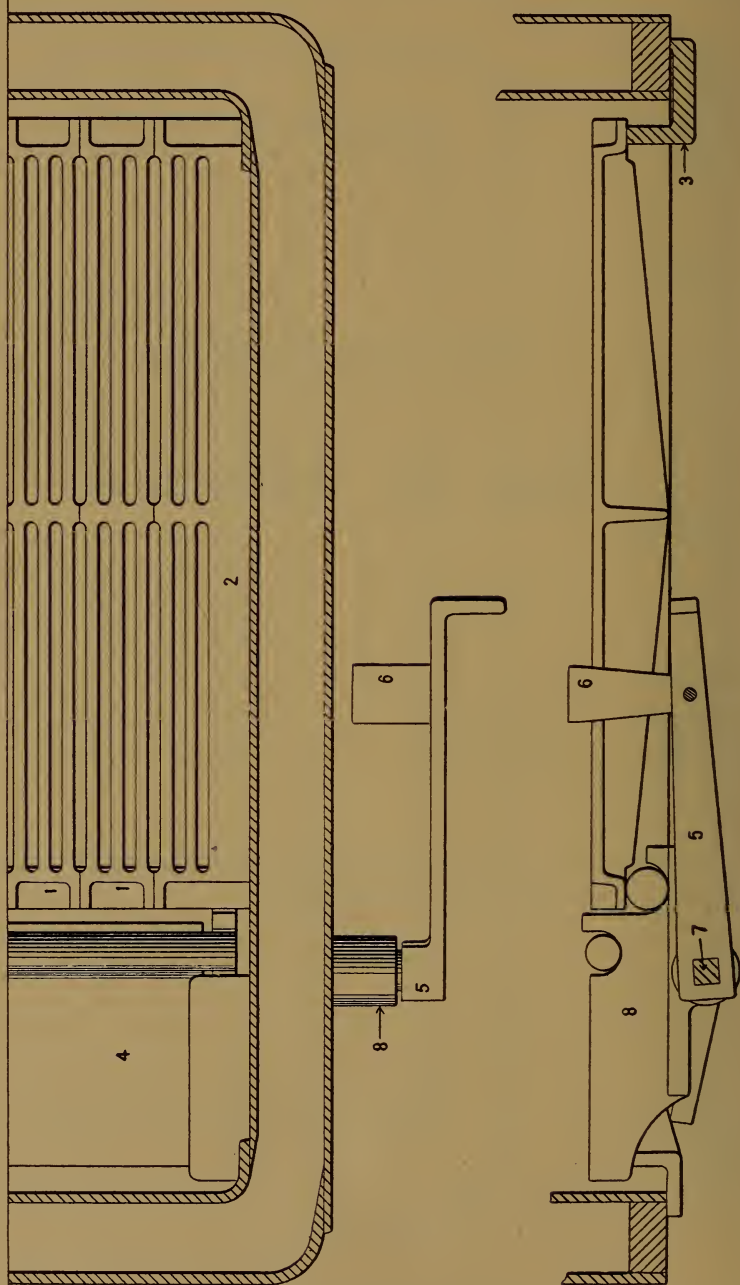
Plain Grate for Wood

Plate 49. Enfronhar

-
- Enfroquer . . 1. Bar.
Enfroward . . 2. Dead Plate.
Enfueirar . . 3. End Holder.

For this plan of grate it will be necessary to specify for which side dead plate is required when not in full sets.

Plate 50



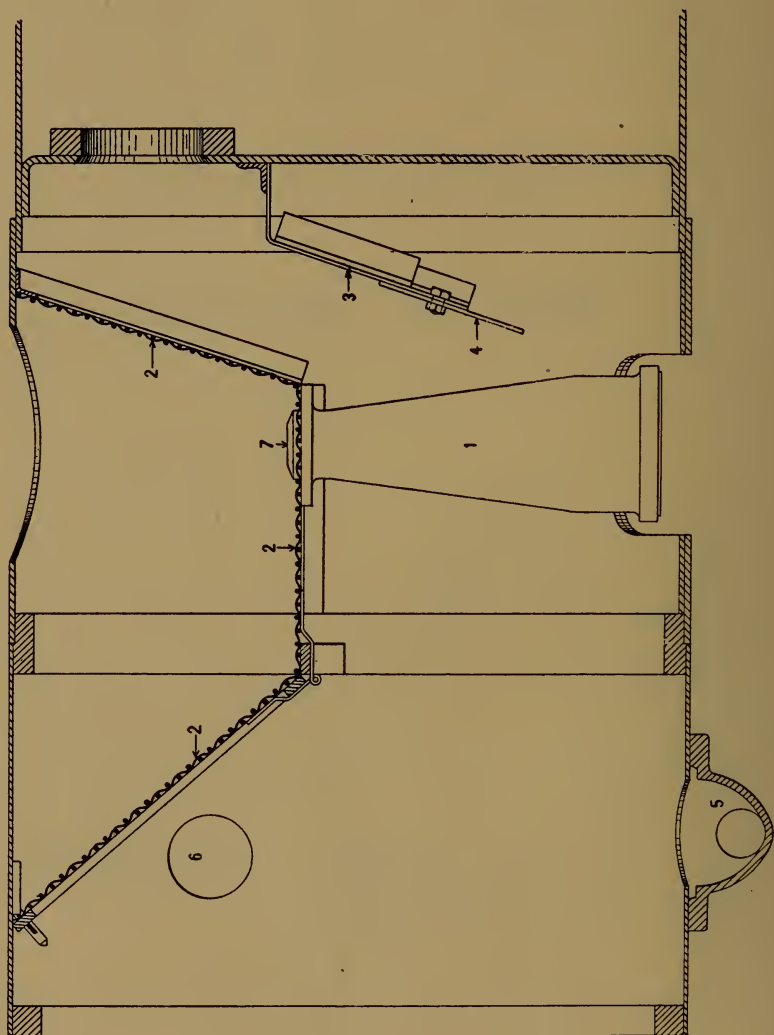
Plain Grate for Soft Coal

Plate 50. Enfuisses

Enfumado	. . 1.	Bar.
Enfumar	. . 2.	Dead Plate.
Enfumoirs	. . 3.	End Holder.
Enfundadas	. 4.	Drop Plate.
Enfundado	. 5.	“ “ Handle.
Enfundamos	6.	“ “ “ Support.
Enfundaron	. 7.	“ “ Shaft.
Enfundeis	. . 8.	“ “ “ Bearing.

The bearings for drop plate shaft are made right and left. This should be observed in ordering duplicates.

Plate 51



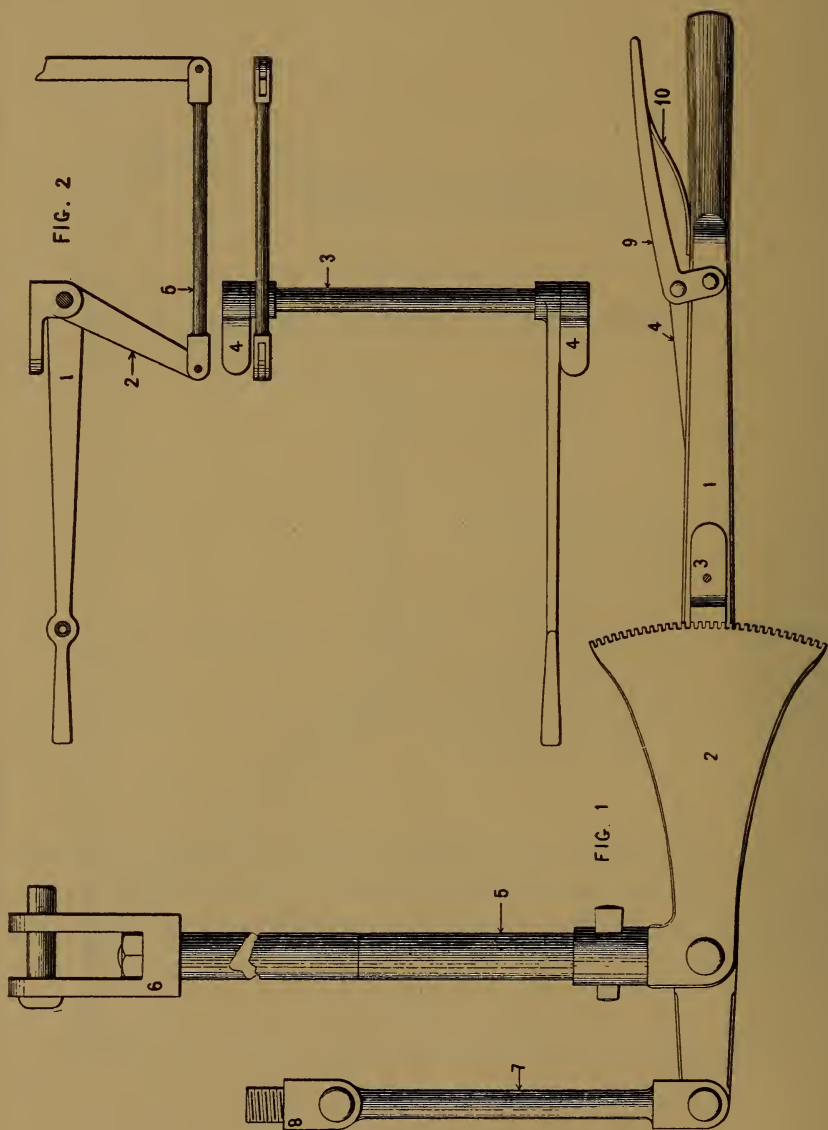
Smokebox Fittings

Plate 51. Enfunester

-
- | | | |
|------------|----------|------------------------|
| Enfunilado | . 1. | Exhaust Nozzle. |
| Enfunilar | . . 2. | Netting. |
| Enfurece | . . 3. | Deflecting Plate. |
| Enfurecida | . 4. | “ “ Slide. |
| Enfurecio | . . 5. | Spark Ejector. |
| Enfurezca | . . 6. | Cleaning Hole and Cap. |
| Enfuriar | . . . 7. | Exhaust Thimbles. |

In ordering these parts, if any change is required from original fittings, especially with reference to nozzle, the order should specify whether single or double opening is wanted. Thimbles always include three sizes to a set, and the particular size wanted, when not in full sets, should be given.

Plate 52



Throttle and Whistle Work

Plate 52. Enfusa

Enfuscado . . . FIG. 1.—Throttle Work.

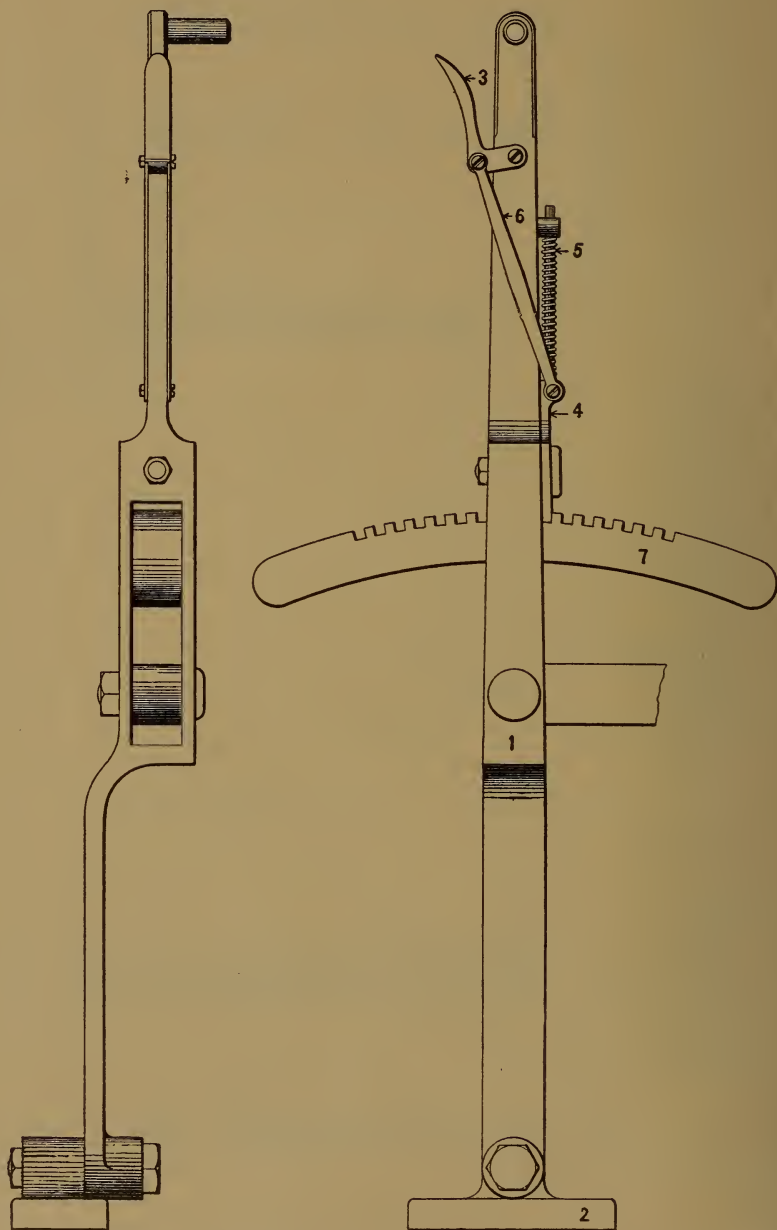
Enfuscar . . .	1. Lever.
Enfuster . . .	2. Quadrant.
Enfutage . . .	3. Latch.
Enfuyais . . .	4. “ Link.
Enfuyant . . .	5. Rod.
Enfuyiez . . .	6. Jaw.
Enfuyons . . .	7. Link.
Engabanado . .	8. “ Stud.
Engabelar . . .	9. Handle.
Engacar . . .	10. “ Spring.

Engachsig . . . FIG. 2.—Whistle Work.

Engaco . . .	1. Lever.
Engageais . . .	2. Arm or Crank.
Engageante . .	3. Shaft.
Engagedly . . .	4. “ Bearing.
Engagiste . . .	5. Link.

In ordering Link No. 5, Fig. 2, the distance from center to center of jaw should be given.

Plate 53

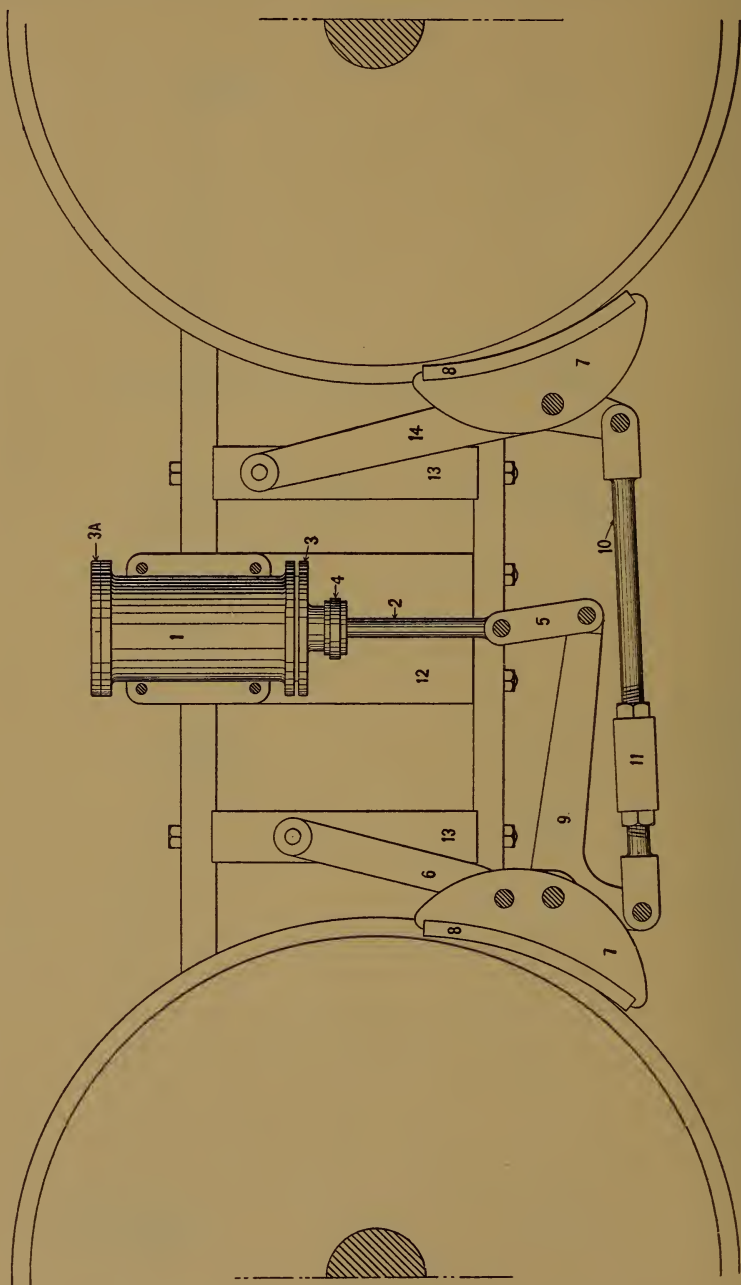


Reverse Lever and Attachments

Plate 53. Engaillage

-
- Engainant . . 1. Lever.
Engaineras . . 2. Fulcrum.
Engainiez . . 3. Handle.
Engainons . . 4. Latch.
Engaiolar . . 5. " Spring.
Engaitadas . . 6. " Rod.
Engaitado . . 7. Catch.

Plate 54



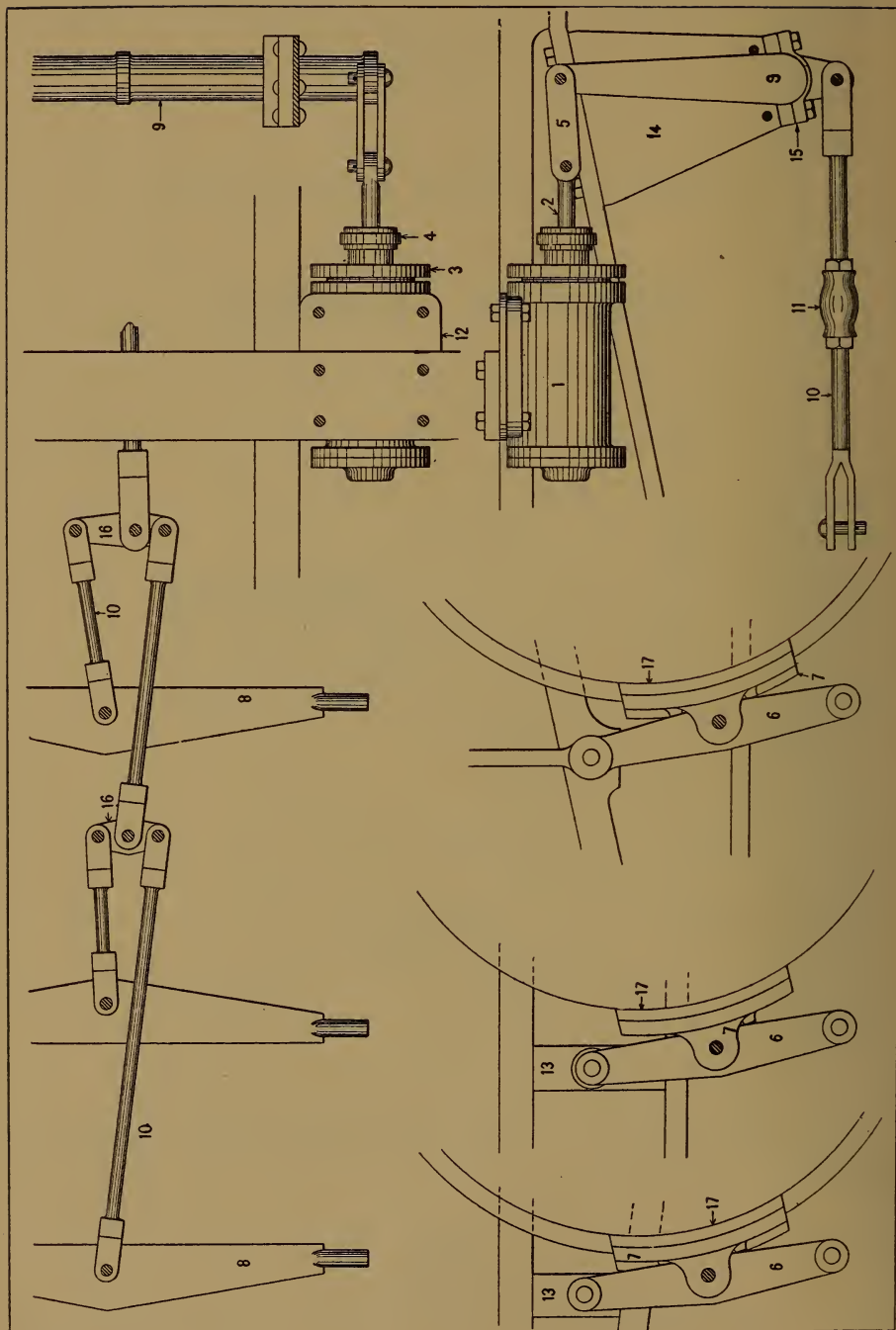
Steam Brake Work (Spread Style)

Plate 54. Engajar

Engalado . . .	1.	Brake Cylinder.
Engalanar . . .	2.	" Piston Rod.
Engalgaban . . .	3.	" Cylinder Head, Bottom.
Engalgada . . .	3A.	" " " Top.
Engalgados . . .	4.	" " Stuffing Box Nut.
Engalla . . .	5.	" Connecting Link.
Engallador . . .	6.	" Hanger Link.
Engallarse . . .	7.	" Head.
Enganabais . . .	8.	" Shoe.
Enganadico . . .	9.	" Bell Crank.
Enganamos . . .	10.	" Rod.
Enganaron . . .	11.	" " Adjusting Nut.
Enganchado . . .	12.	" Cylinder Support.
Engancheis . . .	13.	" Hanger "
Engancho . . .	14.	" Lever.

Separate catalogues of patented power brakes may be obtained by applying to the makers.

Plate 55



Steam Brake Work (Equalized Style)

Plate 55. Engandujo

Enganeis . .	1.	Brake Cylinder.
Engangento . .	2.	" Piston Rod.
Enganifa . .	3.	" Cylinder Head.
Enganosas . .	4.	" " Stuffing Box Nut.
Enganoso . .	5.	" Connecting Link.
Engantant . .	6.	" Lever.
Enganzar . .	7.	" Head.
Engaols . . .	8.	" Beam.
Engarabato . .	9.	" Shaft.
Engaraire . .	10.	" Rod.
Engarampar .	11.	" " Adjusting Nut.
Engarbaba . .	12.	" Cylinder Support.
Engarbadas .	13.	" Hanger.
Engarboil . .	14.	" Shaft Support.
Engarce . . .	15.	" " Bearing.
Engaritado .	16.	" Rod Lever.
Engariteis . .	17.	" Shoe.

Separate catalogues of patented power brakes may be obtained by applying to the makers.

Plate 56

FIG. 1

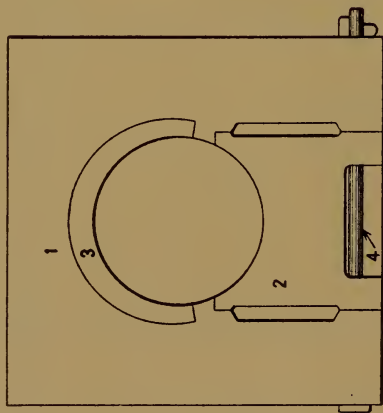


FIG. 2

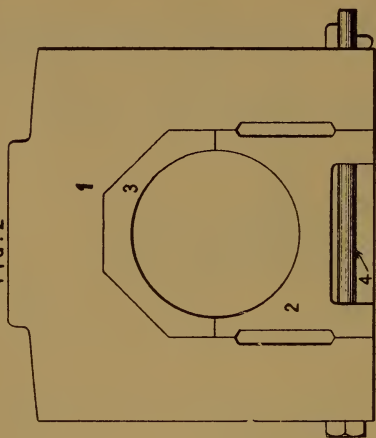
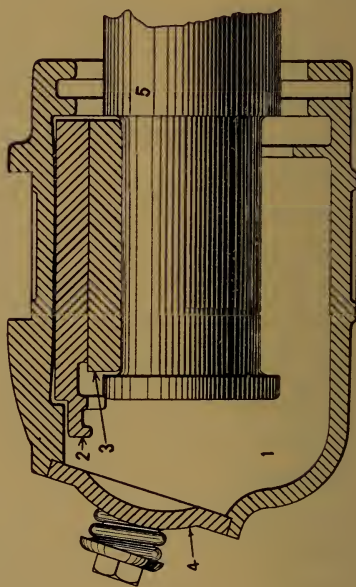


FIG. 3



Journal Boxes

Plate 56. Engarland

Engarrafar . . FIG. 1.—Driving Box.

Engarrafo . . “ 2.—Truck Box.

Engarrison . 1. Box.

Engarzamos . 2. Cellar.

Engarzaron . 3. Brass.

Engarzases . 4. Cellar Bolt.

Engarzeis . . . FIG. 3.—Tender Box.

Engarzo . . . 1. Box.

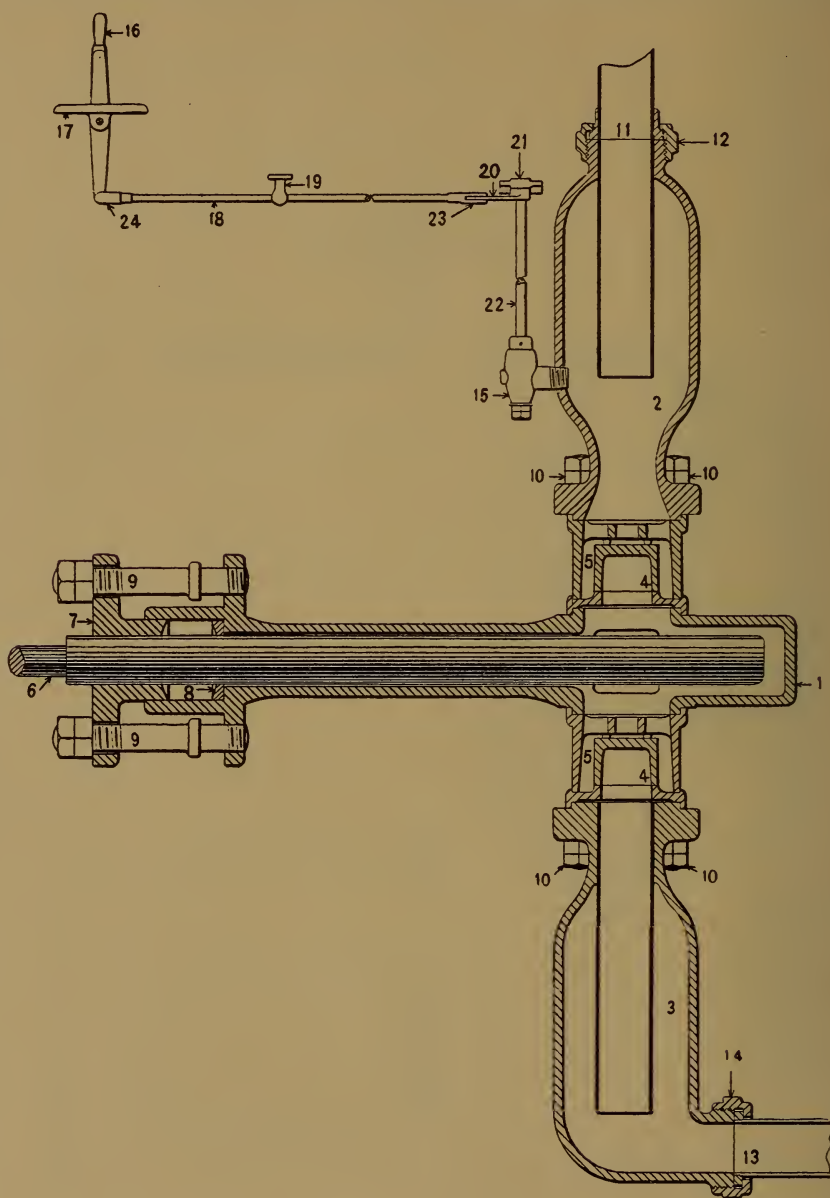
Engasgado . 2. Wedge.

Engastaban . 3. Brass.

Engastada . . 4. Lid.

Engasto . . . 5. Axle.

Plate 57



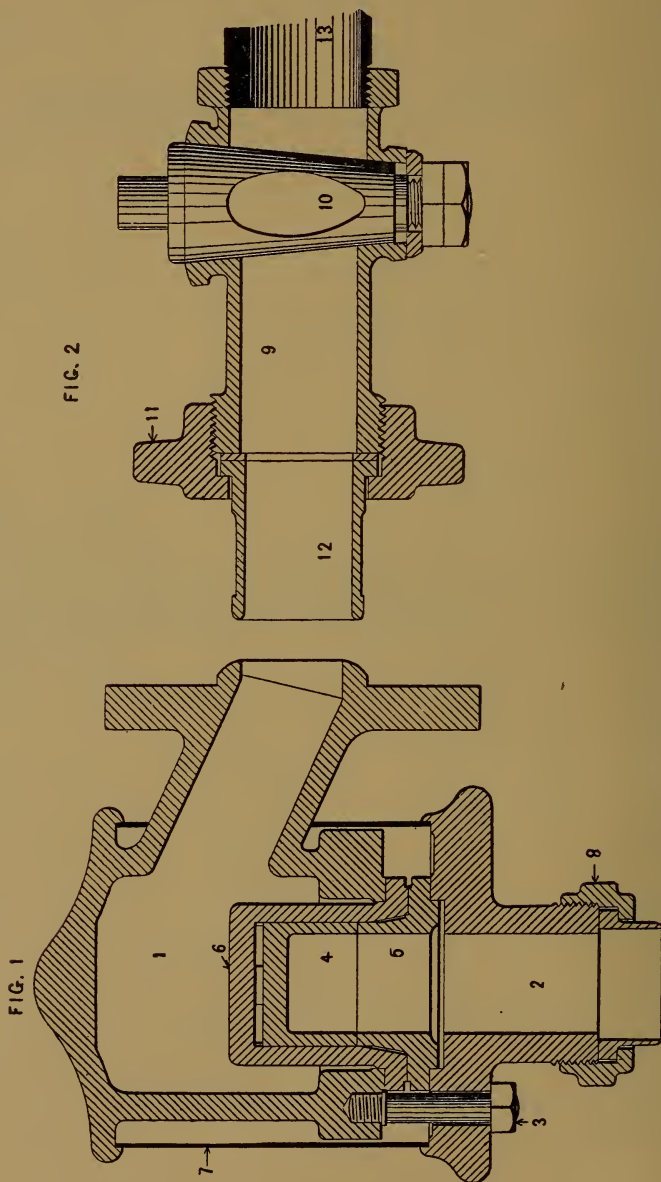
Pump Work

Plate 57. Engathmig

Engatillo . . .	1.	Pump Barrel.
Engatinhar . . .	2.	Top Chamber.
Engatusado . . .	3.	Bottom Chamber.
Engatusar . . .	4.	Valve.
Engatuseis . . .	5.	" Cage.
Engaver . . .	6.	Plunger.
Engazonner . . .	7.	Gland.
Engbloem . . .	8.	" Bottom Ring.
Engbloemen . . .	9.	" Studs.
Engborstig . . .	10.	Chamber Studs.
Engenance . . .	11.	Check Pipe.
Engaigner . . .	12.	" " Coupling Nut.
Engeira . . .	13.	Feed Pipe.
Engeitado . . .	14.	" " Coupling Nut.
Engel . . .	15.	Pet Cock.
Engelbert . . .	16.	" " Lever in Cab.
Engelbild . . .	17.	" " " Fulcrum.
Engelblume . . .	18.	" " " Rod.
Engelfried . . .	19.	" " " " Guide.
Engelgras . . .	20.	" " Crank.
Engelhar . . .	21.	" " " Hanger.
Engelknabe . . .	22.	" " " Rod.
Engelkruid . . .	23.	" " " Jaw.
Engelmesse . . .	24.	" " Lever "

In ordering pump barrel, the side wanted for should be indicated in the order.

Plate 58



Pump Check and Feed Cock

Plate 58. Engelmiene

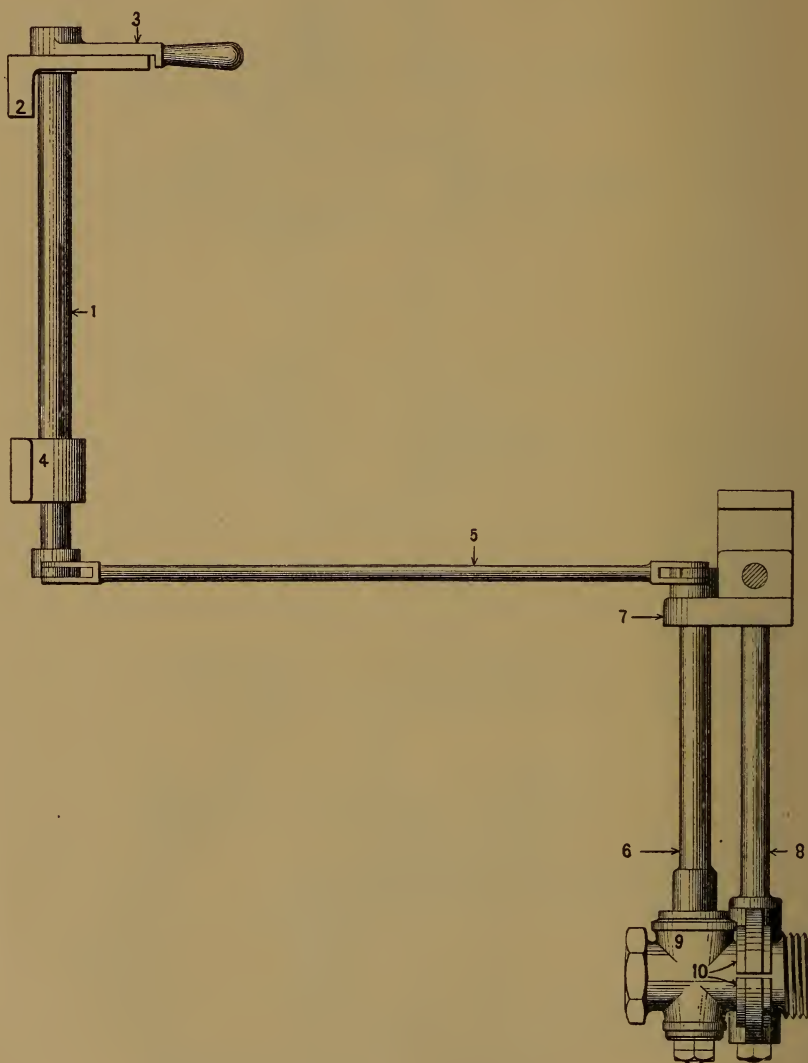
Engelmund . . . FIG. 1.—Pump Check.

Engelname	. 1.	Check Body.
Engelrein	. 2.	“ Flange.
Engelroche	. 3.	“ “ Studs.
Engelsauge	. 4.	Valve.
Engelsch	. 5.	“ Seat.
Engelschar	. 6.	“ Cage.
Engelseele	. 7.	Casing.
Engelskind	. 8.	Check Pipe Coupling Nut.

Engelskopf . . . FIG. 2.—Feed Cock.

Engelstand	. 9.	Feed Cock Body.
Engelstill	. 10.	“ “ Plug and Nut.
Engelsweib	. 11.	Hose Coupling Nut.
Engelthal	. 12.	“ Swivel.
Engeltrude	. 13.	Feed Pipe.

Plate 59

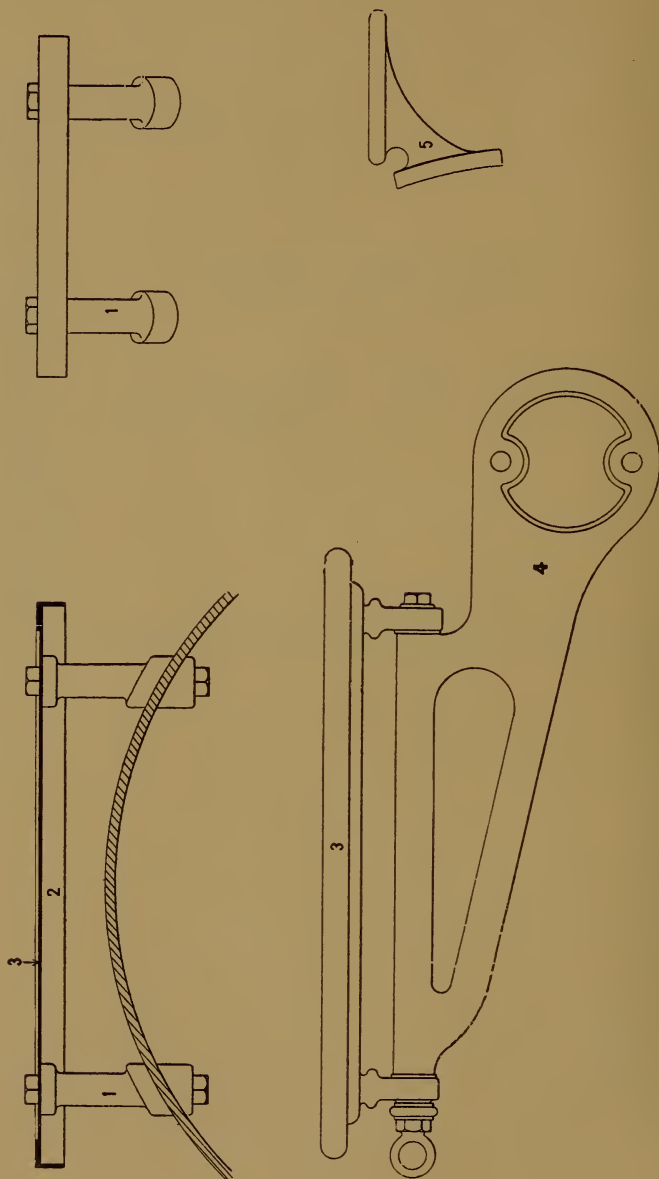


Feed Water Work

Plate 59. Engelure

Engelwelt . .	1.	Shaft.
Engelzoet . .	2.	“ Quadrant.
Engenceant . .	3.	“ Handle.
Engendered . .	4.	“ Hanger.
Engendrais . .	5.	“ Rod.
Engendrér . .	6.	Cock Shaft.
Engendriez . .	7.	“ “ Bearing.
Engendront . .	8.	“ Hanger.
Engenhador . .	9.	Cock.
Engenharia . .	10.	Pipe Clamp.

Plate 60



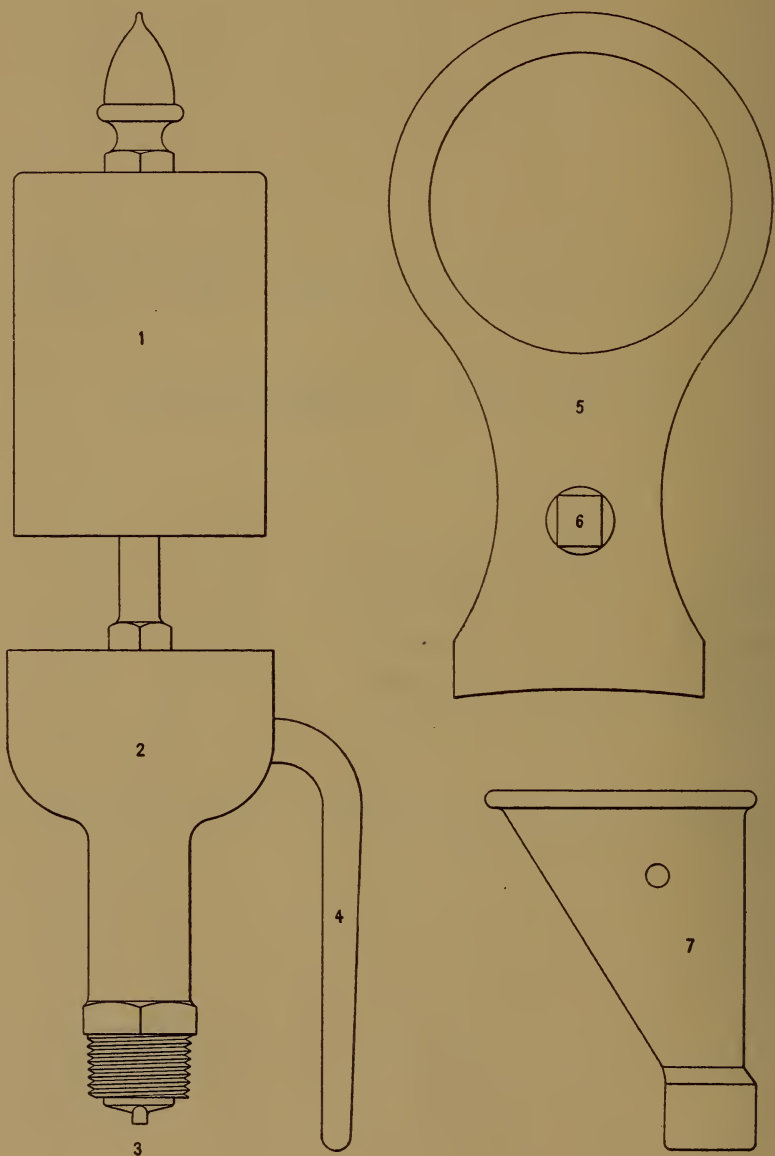
Headlight Shelves and Signal Light Bracket

Plate 60. Engenheiro

- Engenho . . 1. Headlight Shelf Column.
Engenhoso . 2. " " Edge.
Engeoleur . . 3. " Shelf.
Engeray . . . 4. " Bracket.
Engerbage . . 5. Signal Light Bracket.

Headlight brackets are made right and left, and orders for single brackets should specify the side.

Plate 61

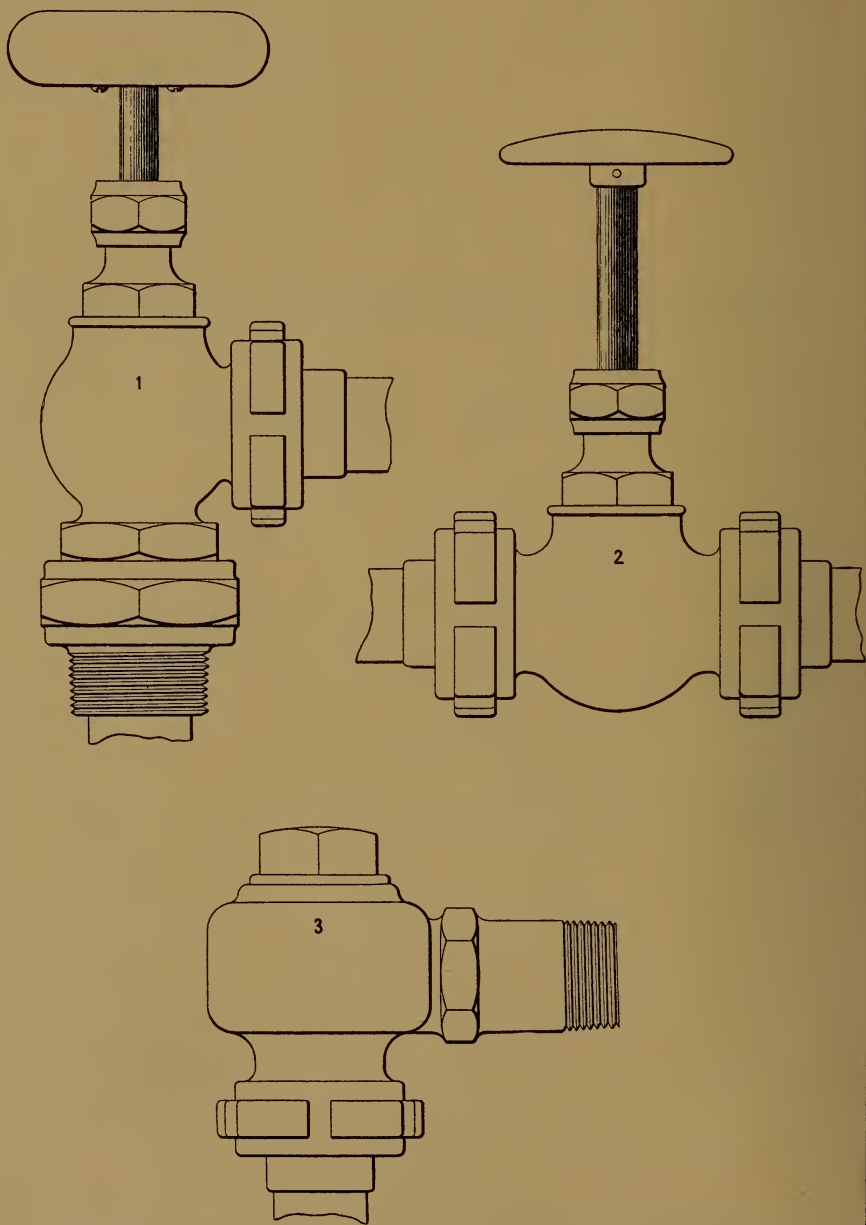


Whistle, Steam Gauge Stand, and Drip Funnel

Plate 61. Engerber

-
- | | | |
|------------|--------|-------------------------|
| Engessar | . . 1. | Whistle Bell. |
| Enggasse | . . 2. | “ Bowl. |
| Engherzig | . . 3. | “ Valve. |
| Engibate | . . 4. | “ Lever. |
| Engibatis | . . 5. | Steam Gauge Stand. |
| Engihoul | . . 6. | Cab Lamp “ |
| Engimelgar | . 7. | Gauge Cock Drip Funnel. |

Plate 62



Injector Valves

Plate 62. Engimelgo

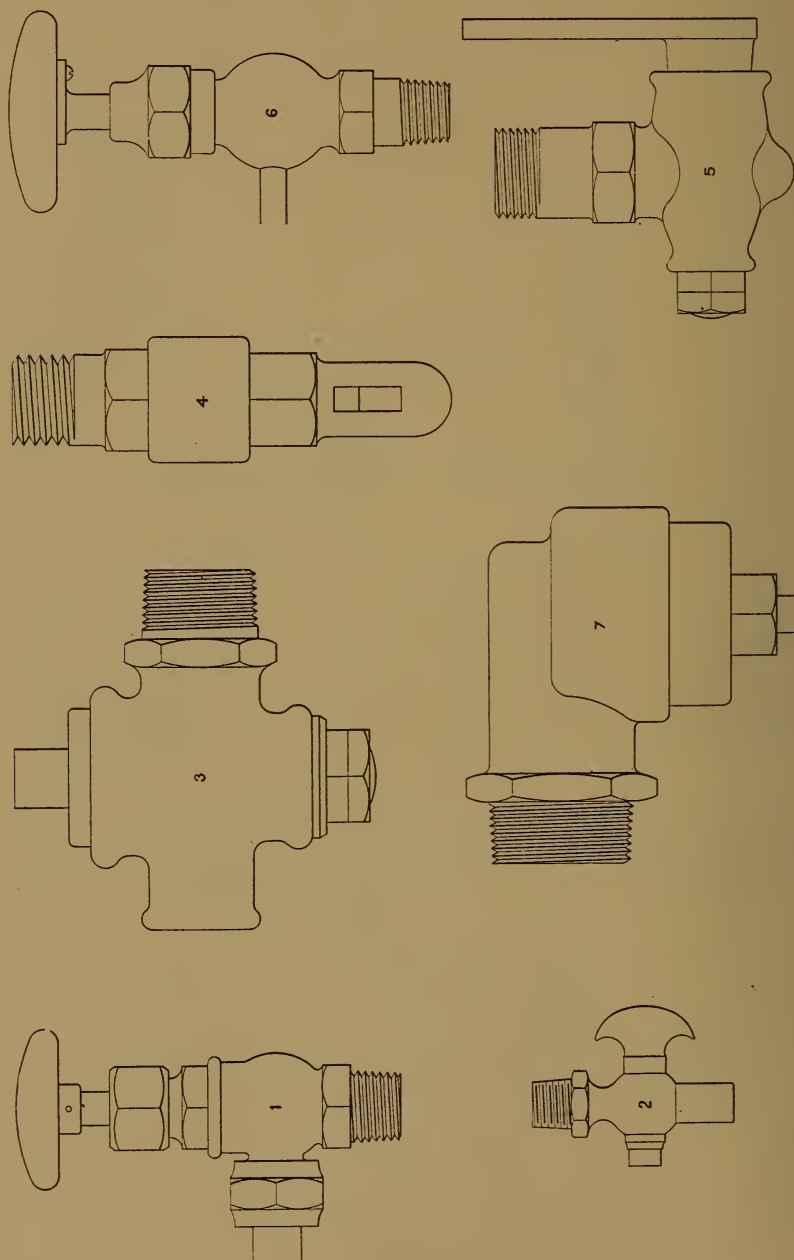
Enginadure . 1. Steam Valve.

Engineers . . 2. Feed “

Engineman . 3. Check “

In ordering these parts, if they are required for any change from original dimensions, or are additional to what was first put on the engine, the size and kind of pipes to be used should be specified.

Plate 63



Valves and Cocks

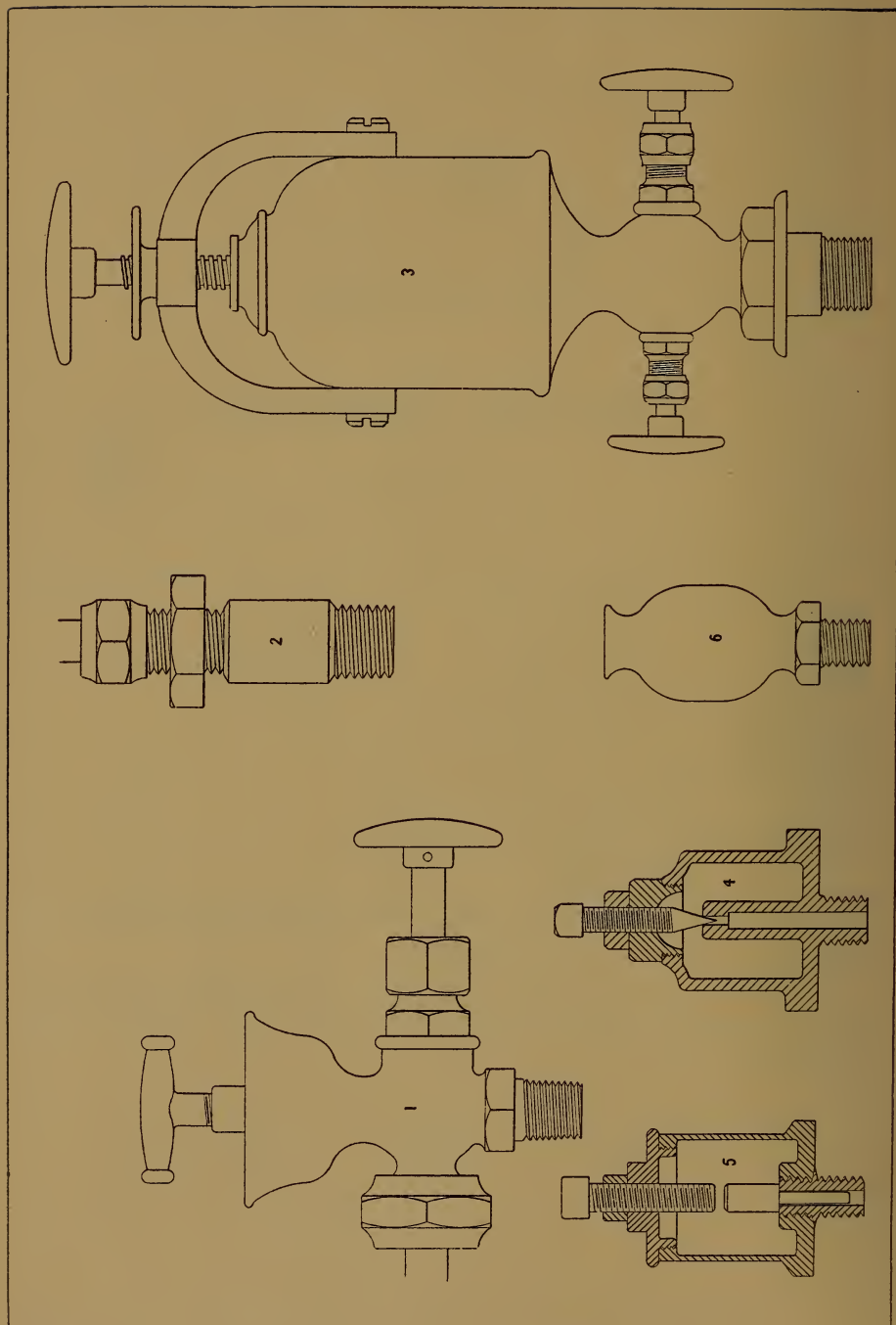
Plate 63. Enginery

Engines . . .	1.	Blower, Heater, Steam Brake Stop Valve or Spark Ejector Valve.
Enginous . . .	2.	Drip Cock.
Engirdle . . .	3.	Blow-off Cock
Engirdling . . .	4.	Cylinder Cock (Buchanan style.)
Engiscopio . . .	5.	“ Cock.
Engisome . . .	6.	Gauge “
Engisop . . .	7.	Steam Chest Relies Valve.

In ordering cylinder cocks when not in full sets, the side they are wanted for must invariably be specified.

In ordering valves covered by number 1 above, specify the name of the valve wanted, as these valves are of different sizes, though of the same type.

Plate 64



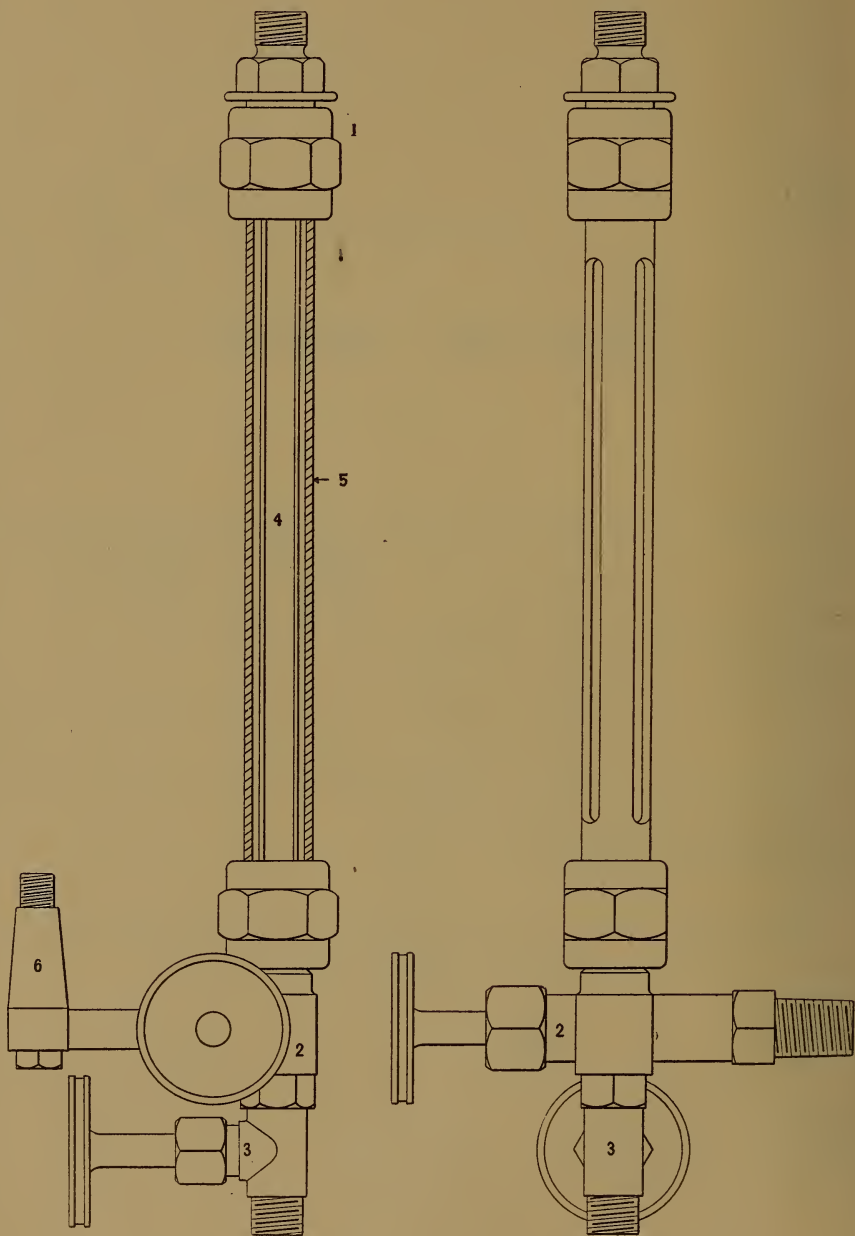
Oil Cups

Plate 64. Englad

- Engladdad . 1. Cylinder Oiler in Cab, Baldwin style. (See Plates 87, 88, 89 and 90 for Sight Feed Cylinder Lubricators.)
- Engladding . 2. Oil Pipe Connection on Steam Chest.
- Englaender . 3. Condensing Oil Cup “ “ “
- Englaine . . 4. Crosshead, Guide, or Connecting Rod Oil Cup (Needle style).
- English . . . 5. Crosshead, Guide, or Connecting Rod Oil Cup (Plunger style).
- Englishman . 6. Rock Shaft Oil Cup.

In ordering numbers 4 or 5, it will be necessary to specify whether they are wanted for crossheads, guides, or rods.

Plate 65

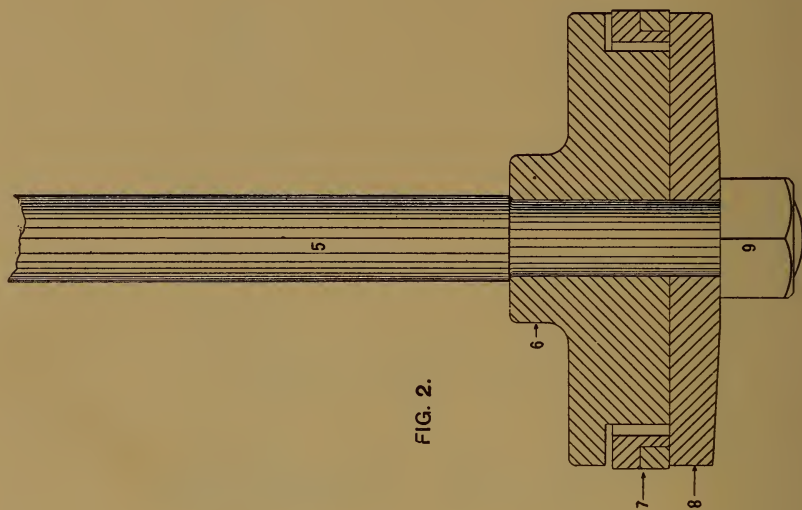
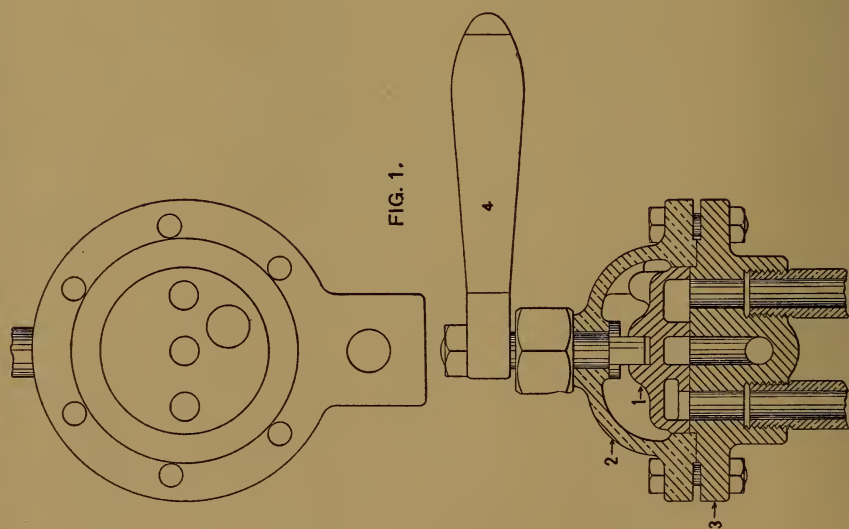


Glass Water Gauge

Plate 65. Englishry

- Englobar . . 1. Upper Fitting.
- Engloom . . 2. Lower “
- Engloomed . 3. Drain Valve.
- Englooming . 4. Glass.
- Engloutir . . 5. Guard.
- Engluage . . 6. Water Gauge Lamp Bracket.

Plate 66



Engineer's Brake Valve, and Steam Brake Piston

Plate 66. Englued

Engluement . . . FIG. 1.—Engineer's Brake Valve.

- Engluing . . . 1. Disc Valve.
- Englut . . . 2. Valve Cover.
- Engmaschig . 3. “ Body.
- Engnetz . . . 4. Handle.

Engobage . . . FIG. 2.—Steam Brake Piston.

- Engodado . . 5. Steam Brake Piston Rod.
- Engodar . . . 6. “ “ Piston.
- Engodativo . 7. “ “ “ Packing Rings.
- Engolfaba . . 8. “ “ “ Follower.
- Engolfamos . 9. “ “ “ Nut.

Plate 67

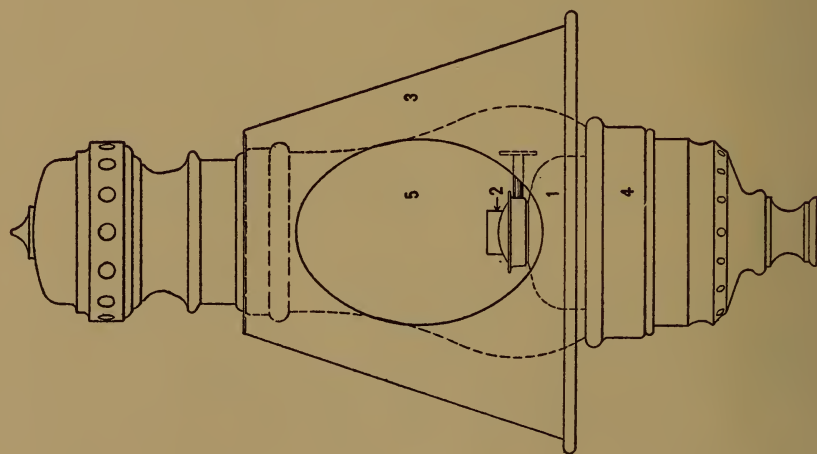


Fig. 1

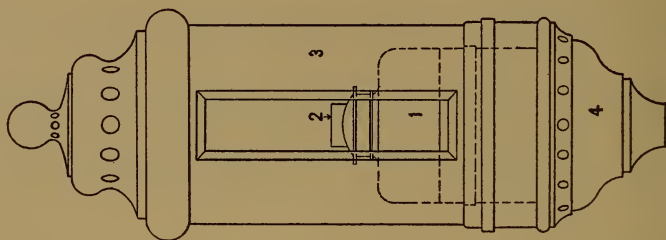


Fig. 2

Steam Gauge Lamp, and Water Gauge Lamp

Plate 67. Engolfando

Engolfaron . . . FIG. 1.—Steam Gauge Lamp.

Engolfases . . . FIG. 2.—Water Gauge Lamp.

Engolfeis . . 1. Reservoir.

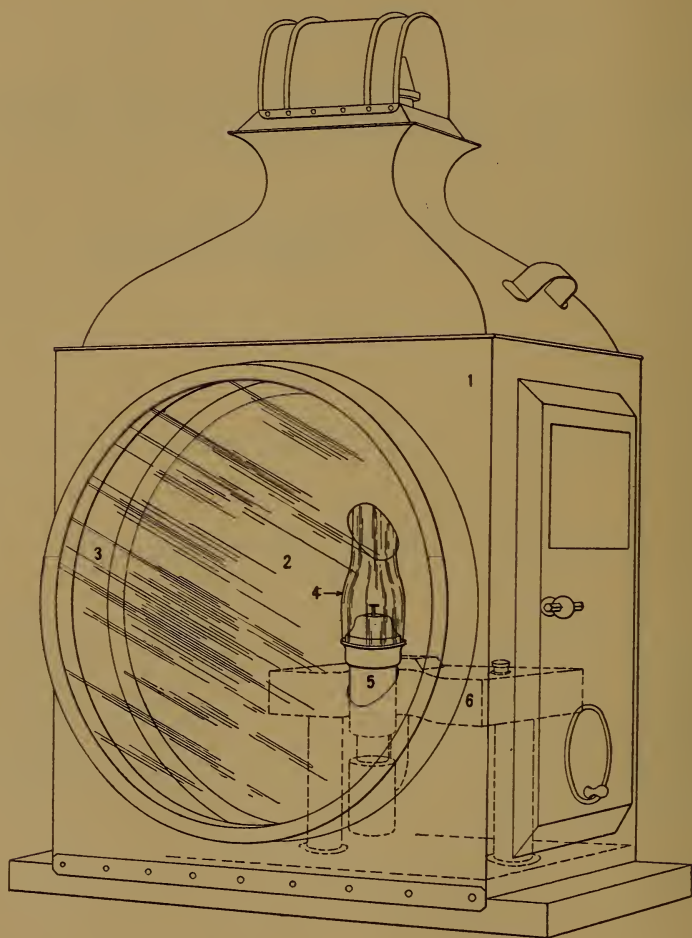
Engolosino . . 2. Burner.

Engomaba . . 3. Shade.

Engomabais . . 4. Base.

Engomadas . . 5. Globe.

Plate 68

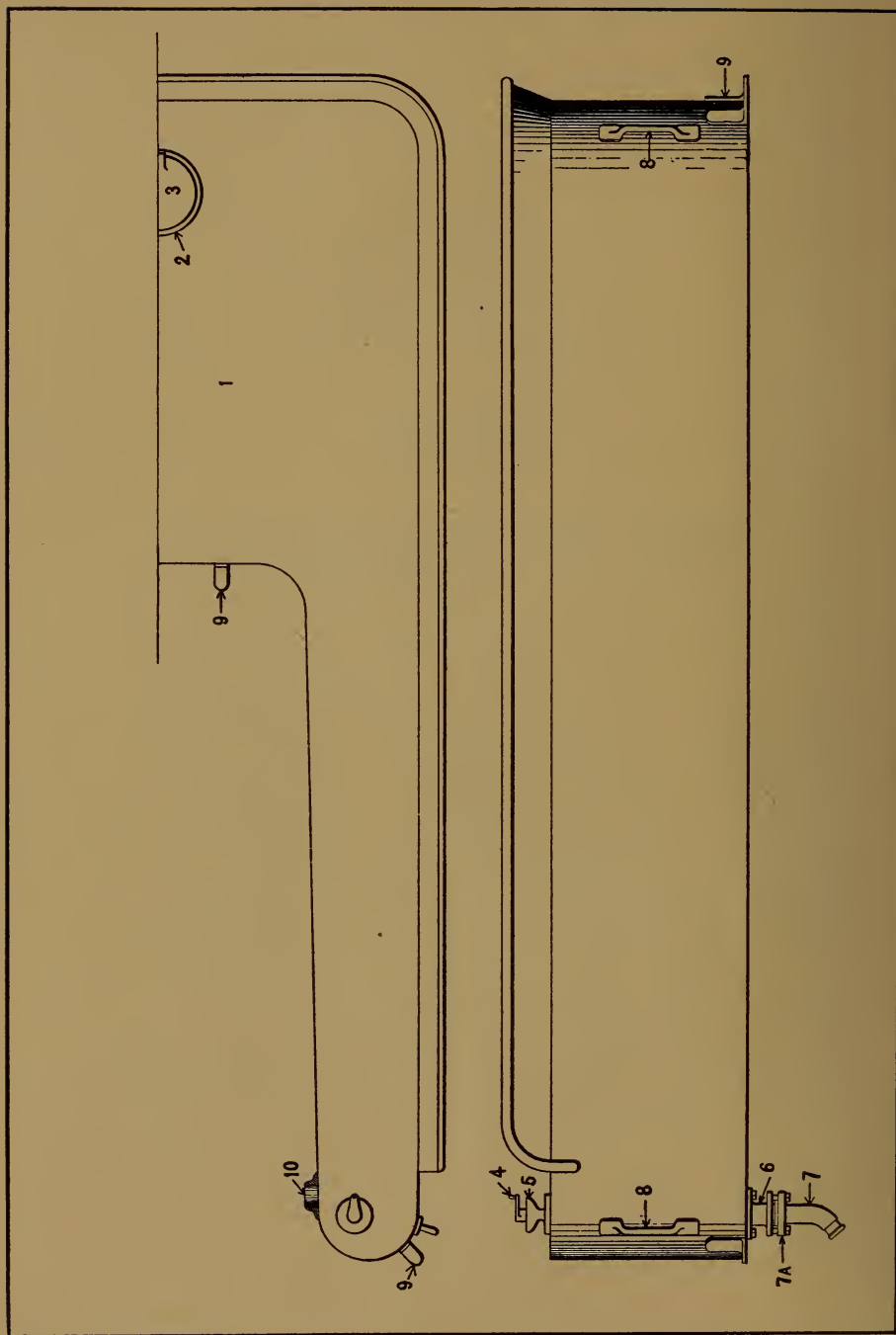


Headlight

Plate 68. Engomadura

- Engomamos . 1. Case.
- Engomarian . 2. Reflector.
- Engomaron . 3. Glass.
- Engomeis . . 4. Chimney.
- Engommant . 5. Burner.
- Engonasi . . 6. Reservoir.

Plate 69

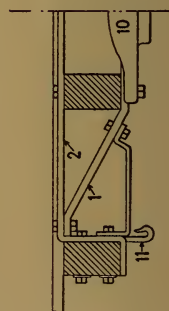
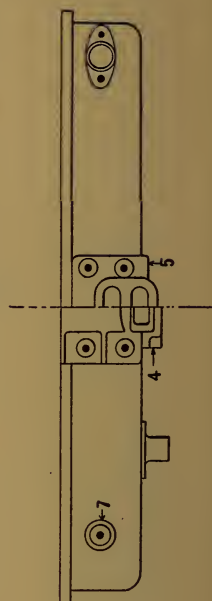
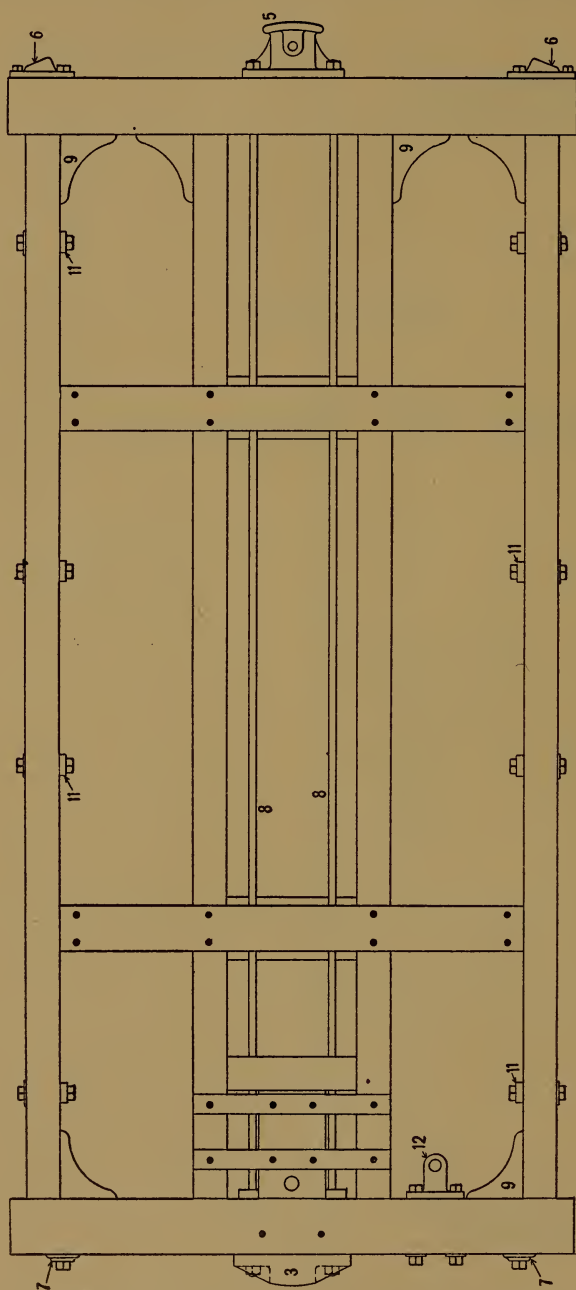


Water Tank

Plate 69. Engoncar

Engordaron	. 1.	Tank.
Engordasen	. 2.	Filling Funnel.
Engordurar	. 3.	Funnel Lid.
Engorgeant	. 4.	Valve Lifter.
Engorgeth	. 5.	“ Wheel.
Engorgitar	. 6.	“ Body.
Engorlador	. 7.	“ Gooseneck.
Engorlar	. . 7A.	“ “ Flange.
Engorroso	. . 8.	Handles.
Engouant	. . 9.	Lugs.
Engouffre	. . 10.	Fuel Board Angle Iron.

Plate 70



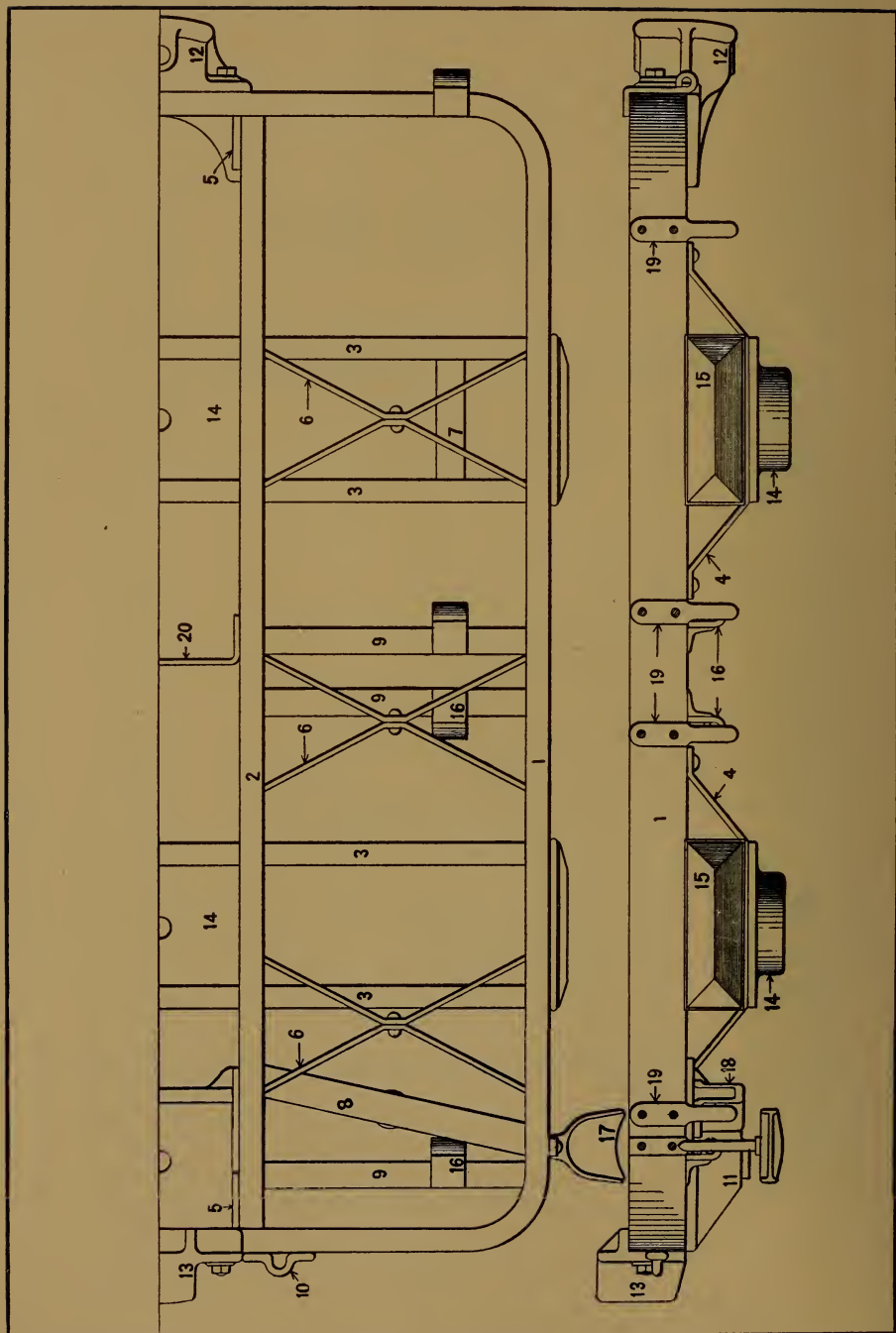
Tender Frame, Wood

Plate 70. Engourdir

-
- | | | |
|------------------|-----|---------------------------------|
| Engoznabas . . . | 1. | Truss Bar. |
| Engoznado . . . | 2. | “ “ Crosstie. |
| Engoznaran . . . | 3. | Wedge Block or Chafing Casting. |
| Engoznas . . . | 4. | Front Draw Casting. |
| Engpaessen . . . | 5. | Back “ “ |
| Engpass . . . | 6. | Pushing Shoe. |
| Engracado . . . | 7. | Frame Washer. |
| Engracante . . . | 8. | Longitudinal Draw Casting Bolt. |
| Engrachar . . . | 9. | Corner Bracket. |
| Engracia . . . | 10. | Center Pin. |
| Engradecer . . . | 11. | Safety Chain Hook. |
| Engrailing . . . | 12. | Brake Shaft Guide. |

Orders for center pins should specify whether front or back are required when not for full sets.

Plate 71



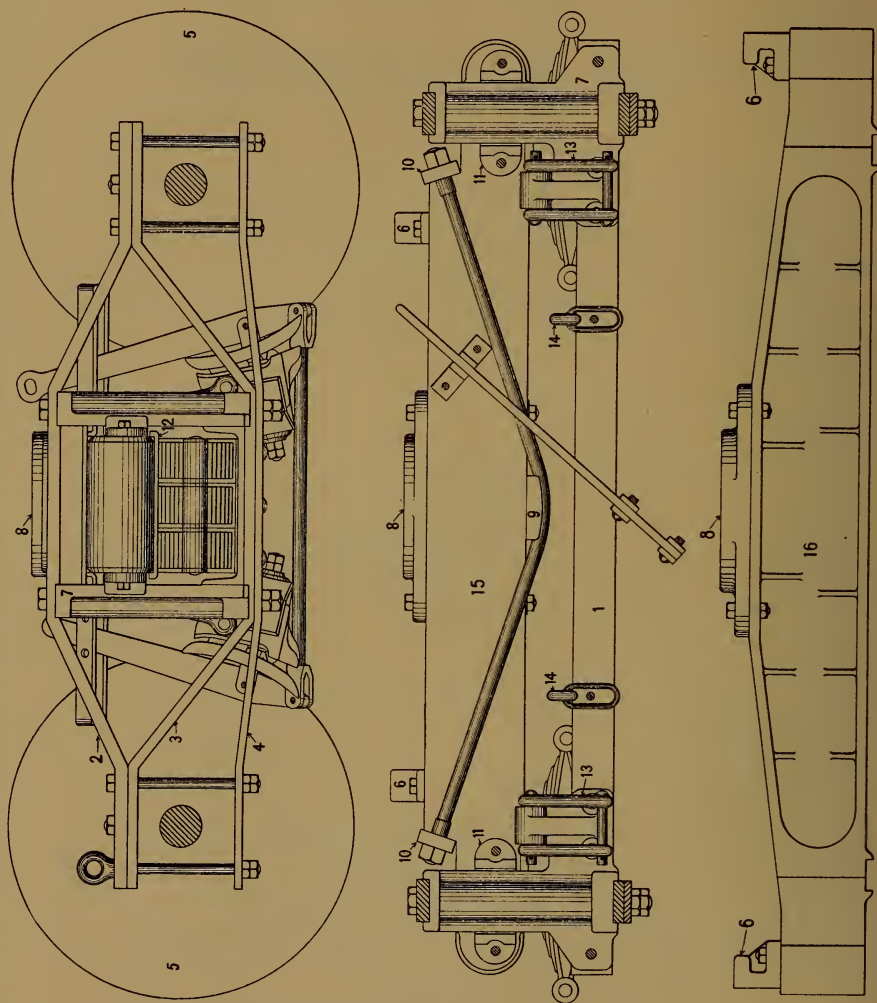
Tender Frame, Iron

Plate 71. Engrainage

Engraisser . .	1.	Side Channel Bar.
Engraixar . .	2.	Longitudinal Channel Bar.
Engranaje . .	3.	Transverse " "
Engrandeci . .	4.	" " " Strap.
Engranero . .	5.	Corner Plate.
Engranger . .	6.	Brace.
Engranizar . .	7.	Side Bearing.
Engrapador . .	8.	Brake Shaft Crosstie.
Engraparas . .	9.	" Hanger Angle Iron.
Engrapasa . .	10.	Safety Chain Hanger.
Engrapasen . .	11.	Front Draw Casting.
Engrapped . .	12.	Back " "
Engrasais . .	13.	Chafing Casting.
Engrasando . .	14.	Center Pin.
Engrasaran . .	15.	Bolster Cap.
Engrasaria . .	16.	Brake Clevis.
Engrases . .	17.	Tender Step.
Engrasped . .	18.	Brake Shaft Step.
Engrasping . .	19.	Safety Chain Hook.
Engratie . .	20.	Brace.

Orders for center pins should specify whether front or back are required when not for full sets.

Plate 72



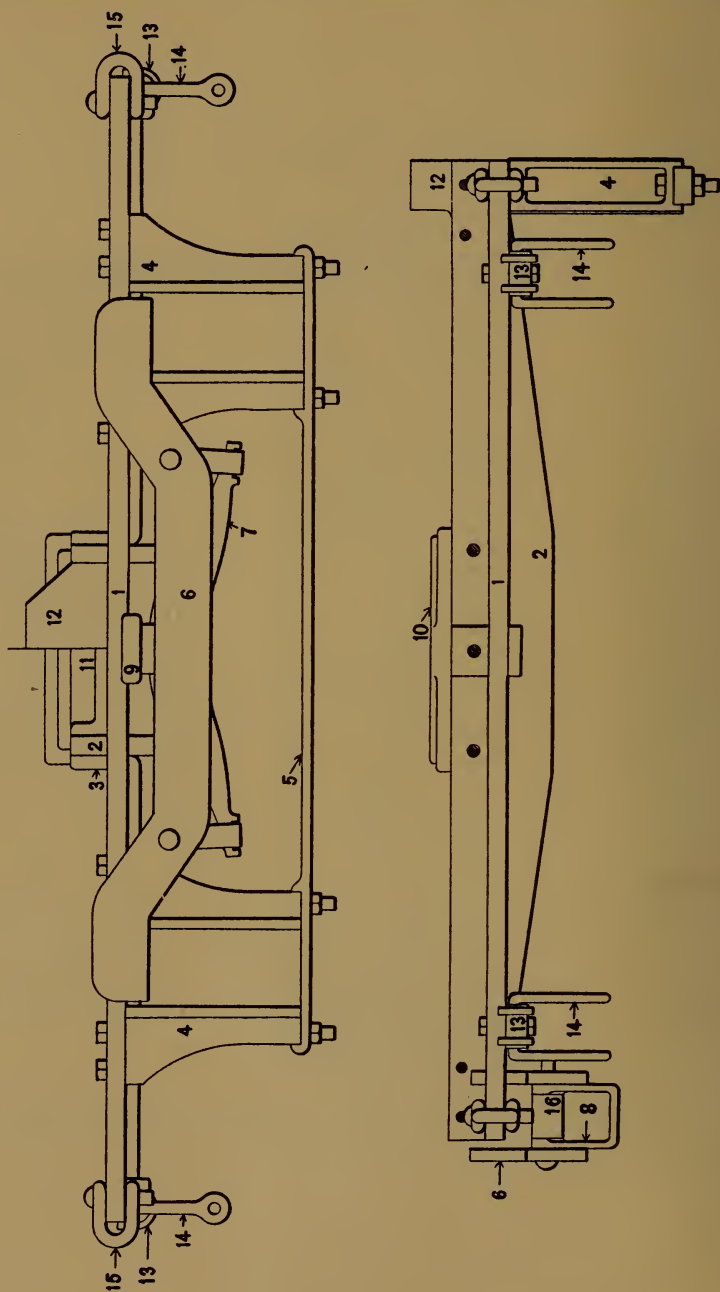
Tender Truck, Arch Bar

Plate 72. Engraulis

Engrave . . .	1.	Channel Bar.
Engravery . .	2.	Top Bar of Frame.
Engravure . .	3.	Truss " " "
Engreaten . .	4.	Bottom " " "
Engreecer . .	5.	Wheel.
Engregge . .	6.	Side Bearing.
Engreimos . .	7.	Frame Filling Piece.
Engreiran . .	8.	Center Plate.
Engreireis . .	9.	Truss "
Engrelar . .	10.	" Washer.
Engrenhar . .	11.	Bolster Guide.
Engrescado . .	12.	Spring Seat.
Engrescar . .	13.	Brake Clevis.
Engresques . .	14.	" Beam Safety Chain.
Engret . . .	15.	Bolster, Wood.
Engreter . .	16.	Bolster, Cast Steel.

In ordering parts for a single truck, the order should specify whether they are wanted for front or back truck.

Plate 73



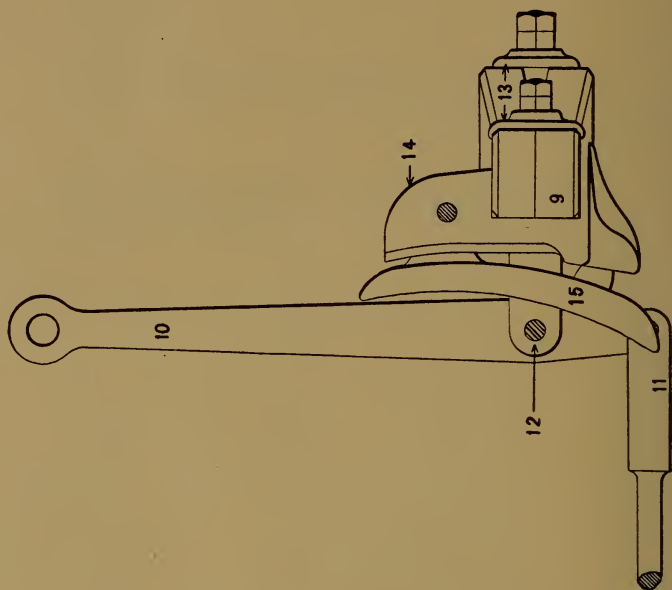
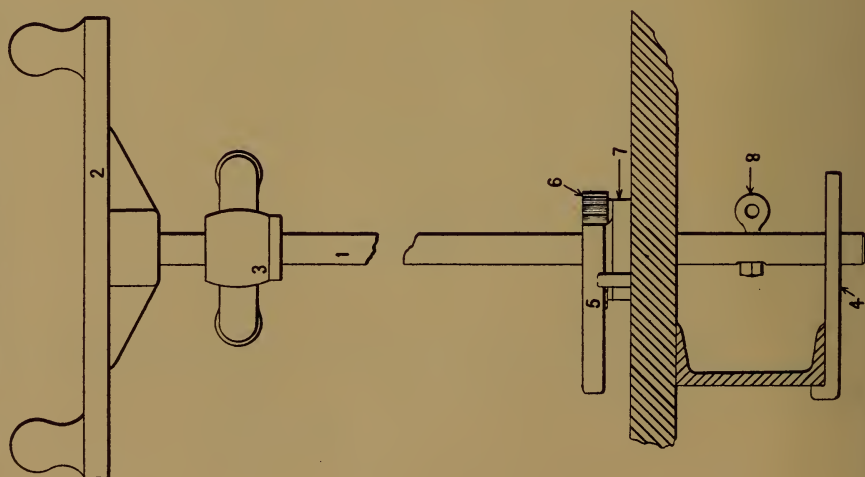
Tender Truck, Wrought Iron

Plate 73. Engrieves

Engrimanco . . .	1.	Frame.
Engrogne . . .	2.	Crosstie.
Engrosado . . .	3.	“ Brace.
Engrosamos . . .	4.	Pedestal.
Engrossed . . .	5.	“ Cap.
Engrossing . . .	6.	Equalizing Beam.
Engrotar . . .	7.	Spring.
Engrudabas . . .	8.	“ Link.
Engrudador . . .	9.	“ Seat.
Engrudara . . .	10.	Center Plate.
Engrueso . . .	11.	Frame Filling Piece.
Engrumecer . . .	12.	Side Bearing.
Engrumecio . . .	13.	Brake Hanger.
Engrumele . . .	14.	“ Clevis.
Engsichtig . . .	15.	Safety Chain Clevis.
Engsinn . . .	16.	Spring Link Washer.

In ordering parts for a single truck, the order should specify whether they are wanted for front or back truck.

Plate 74

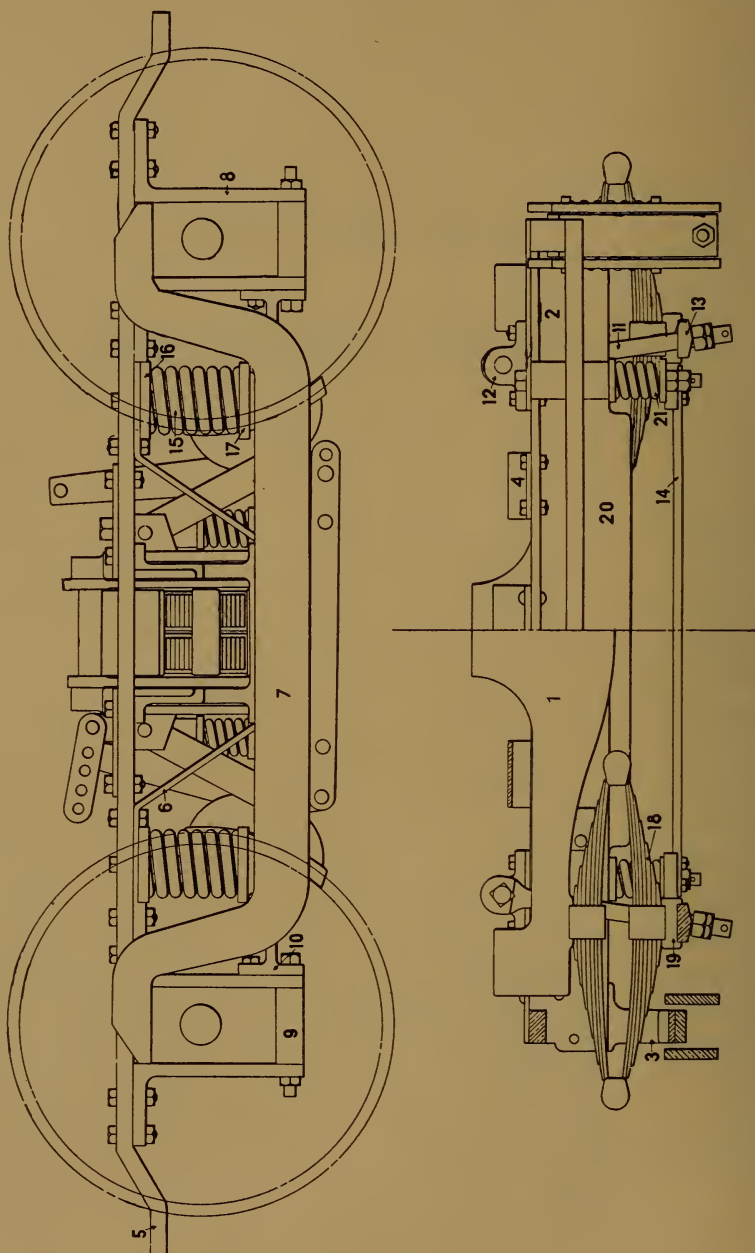


Tender Brake Work

Plate 74. Engsinnige

Engualdado . .	1.	Shaft.
Engualdar . .	2.	Handle.
Engualdeis . .	3.	Hanger
Engualdo . .	4.	Step.
Enguantada . .	5.	Pawl.
Enguantes . .	6.	Ratchet.
Enguard . .	7.	Plate.
Enguarding . .	8.	Eye Bolt.
Enguenille . .	9.	Beam.
Engueuser . .	10.	Lever.
Enguia . . .	11.	" Rod.
Enguicador . .	12.	" Jaw.
Enguicar . .	13.	Washer.
Enguichado . .	14.	Head.
Enguiche . .	15.	Shoe.

Plate 75

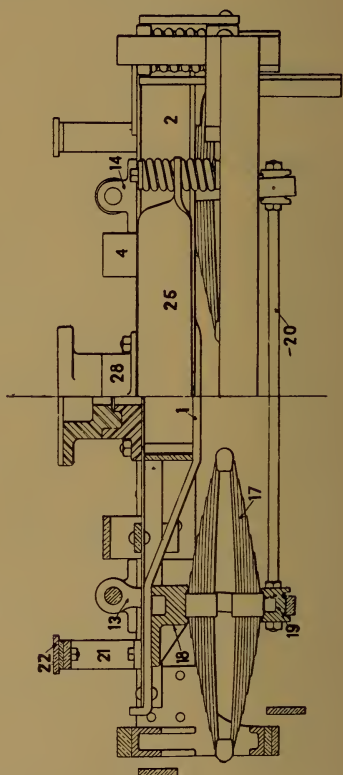
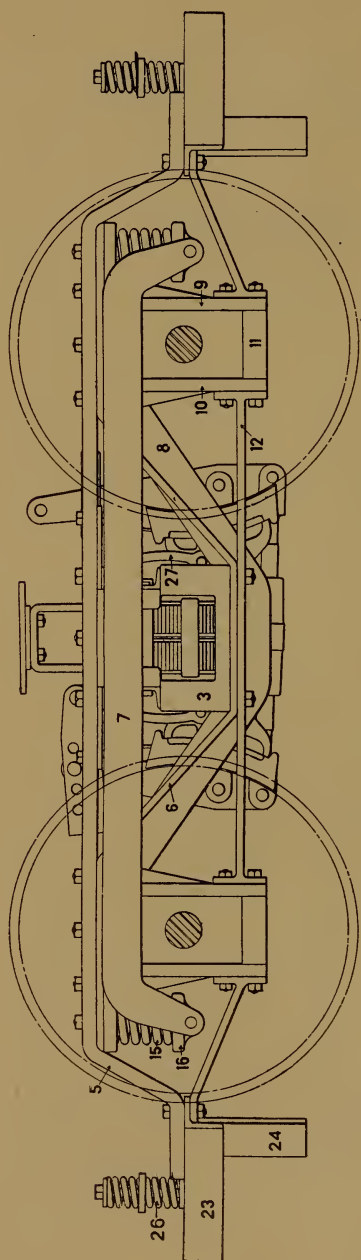


Electric Truck for Inside Hung Motors

Plate 75. Enguico

Enguijarro . .	1.	Bolster.
Enguinos . .	2.	Transom.
Enguizgado . .	3.	“ End Filling Piece.
Enguizgo . .	4.	“ Tie Plate.
Enguizgue . .	5.	Truck Frame.
Engulfed . .	6.	Truss Bar.
Engulfing . .	7.	Equalizing Beam.
Engulfment . .	8.	Pedestal.
Engulho . . .	9.	“ Cap.
Engulidor . .	10.	“ Tie Bar.
Engulipar . .	11.	Swing Link.
Engulir . . .	12.	“ “ Bearing.
Engulliais . .	13.	“ Beam.
Engullidas . .	14.	“ “ Crosstie.
Engulliste . .	15.	Equalizing Beam Spring.
Engurria . .	16.	“ “ “ Seat (Top).
Engweg . . .	17.	“ “ “ “ (Bottom).
Engyi	18.	Bolster Spring.
Engyon . . .	19.	“ “ Seat.
Engyscope . .	20.	Motor Suspension Bar.
Engystome . .	21.	“ “ Spring.

Plate 76

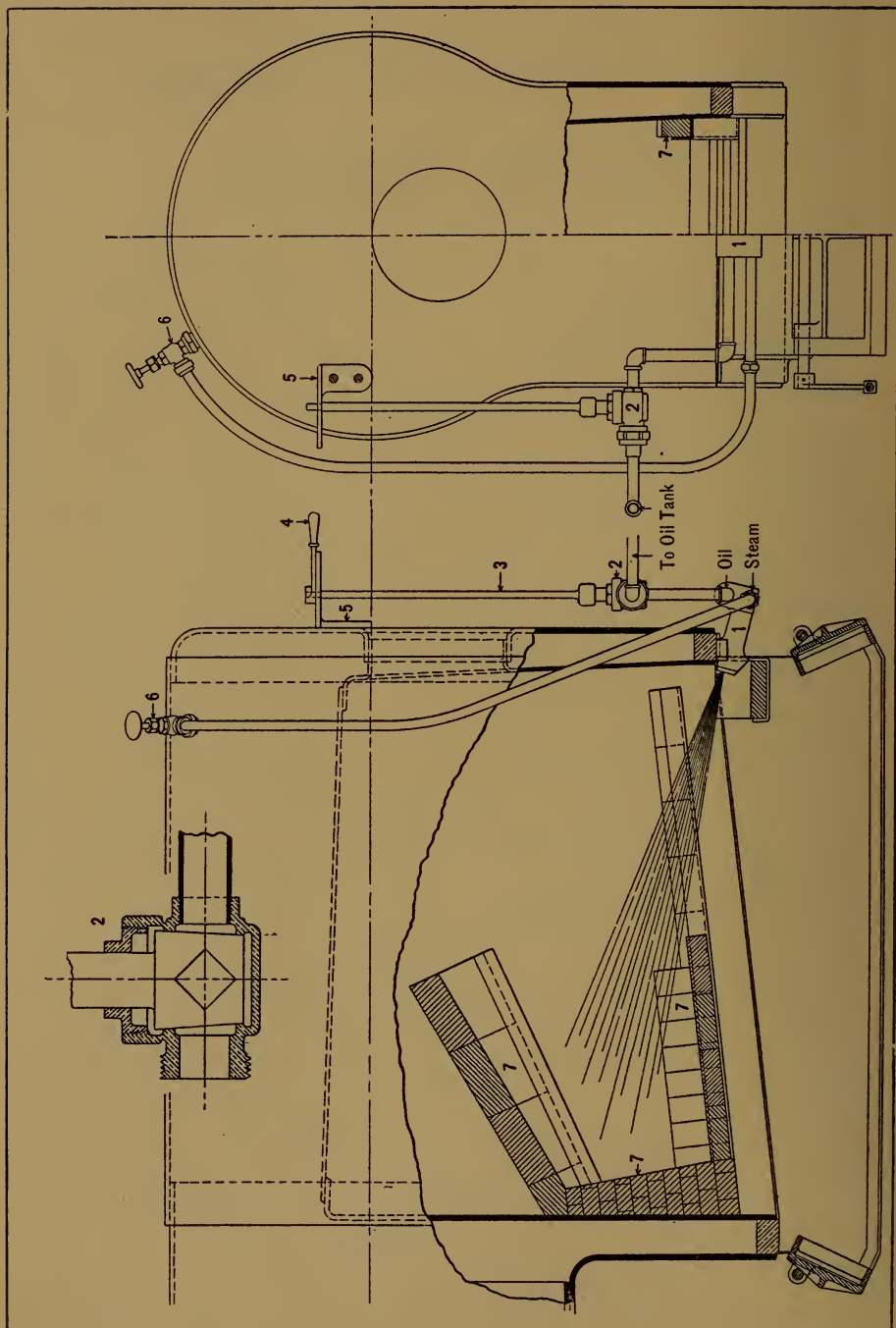


Electric Tuck for Outside Hung Motors

Plate 76. Engyum

Enhabile . . .	1.	Bolster.
Enhabling . . .	2.	Transom.
Enhache . . .	3.	“ End Filling Piece.
Enhaemon . . .	4.	“ Tie Plate.
Enhale . . .	5.	Truck Frame.
Enhalsing . . .	6.	Truss Bar.
Enhanced . . .	7.	Equalizing Beam (Outside).
Enhancing . . .	8.	“ “ (Inside).
Enharbour . . .	9.	Pedestal (Outside).
Enhardened . . .	10.	“ (Inside).
Enhardimes . . .	11.	“ Cap.
Enhardiras . . .	12.	“ Tie Bar.
Enharinado . . .	13.	Swing Link.
Enharinar . . .	14.	“ “ Bearing.
Enharineis . . .	15.	Equalizing Beam Spring.
Enharino . . .	16.	“ “ “ Seat.
Enharmenic . . .	17.	Bolster Spring.
Enharnache . . .	18.	“ “ Seat (Top).
Enhatijaba . . .	19.	“ “ “ (Bottom).
Enhatijar . . .	20.	“ “ “ Tie Rod.
Enhatijo . . .	21.	Side Bearing.
Enhayeur . . .	22.	“ “ Plate.
Enhearten . . .	23.	End Frame.
Enhebradas . . .	24.	Rail Guard Bracket.
Enhebrado . . .	25.	Motor Suspension Bar.
Enhebramos . . .	26.	“ “ Spring.
Enhebrar . . .	27.	Brake Clevis.
Enhebraron . . .	28.	Center Plate.

Plate 77



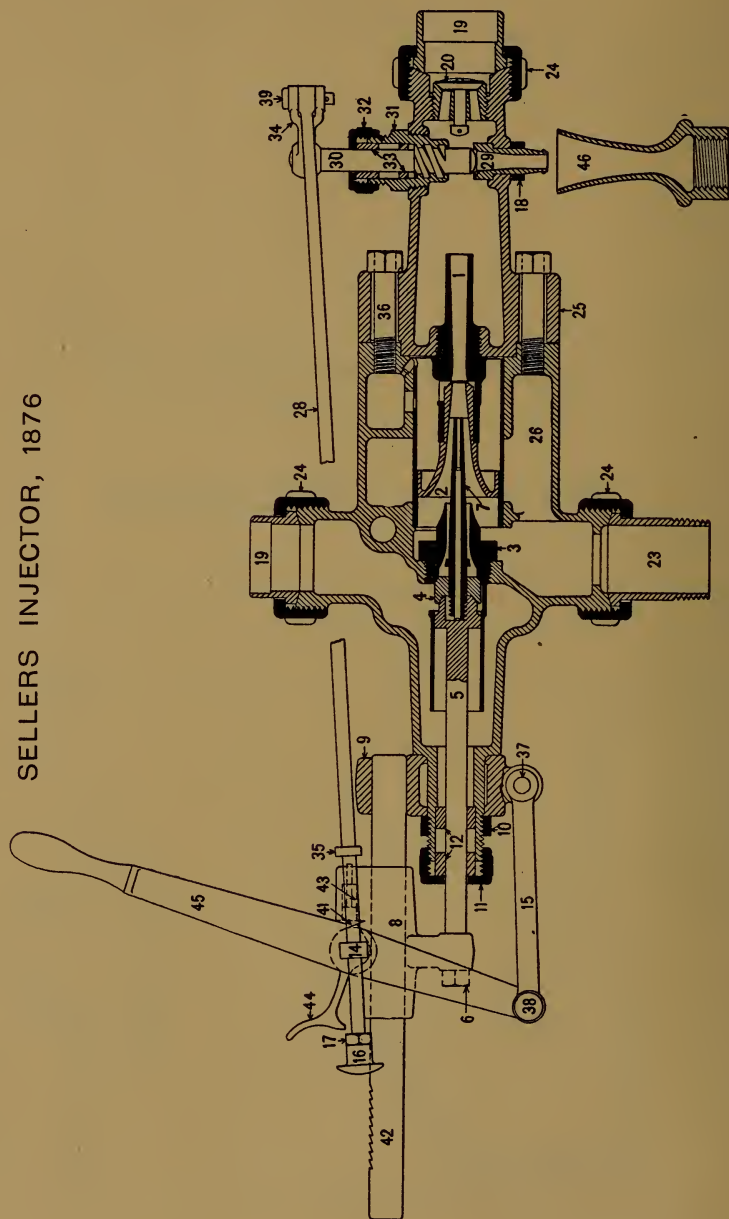
Apparatus for Burning Fuel Oil

Plate 77. Enhebreis

- Enhedged . . 1. Oil Injector.
Enhedging . 2. " Cock.
Enherbolar . 3. " " Shaft.
Enherbolo . . 4. " " " Handle.
Enhestador . 5. " " Quadrant.
Enhestamos . 6. " Injector Steam Valve.
Enhestar . . 7. Fire Brick.

Plate 78

SELLERS INJECTOR, 1876



Sellers Injector, 1876

Plate 78. Enhestaron

Enhestases . . .	1.	Delivery Tube.
Enheuder . . .	2.	Combining Tube.
Enhielado . . .	3.	Steam Nozzle.
Enhielar . . .	4.	Valve on No. 7.
Enhielo . . .	5.	Solid Spindle.
Enhoramala . . .	6.	Nut on top of No. 5.
Enhorts . . .	7.	Hollow Spindle.
Enhuche . . .	8.	Crosshead.
Enhuerado . . .	9.	Collar on No. 26.
Enhueraron . . .	10.	Lock Nut for No. 9.
Enhuiler . . .	11.	Follower on No. 26.
Enhunger . . .	12.	Packing Rings under No. 11.
Enhungered . . .	14.	Fulcrum Pin.
Enhydridem . . .	15.	Link.
Enhydro . . .	16.	Knob on end of No. 28.
Enhydrobie . . .	17.	Lock Nut for No. 16.
Enhydrorum . . .	18.	Nut on No. 29.
Enhygros . . .	19.	Plain Ring for Copper Pipe.
Enicabant . . .	20.	Check Valve.
Enicabimus . . .	23.	Union to Pipes.
Enicocere . . .	24.	Coupling Nut.
Enicode . . .	25.	Lower Cylinder.
Eniconette . . .	26.	Upper " "
Eniconevre . . .	28.	Connecting Rod.
Enicostome . . .	29.	Waste Pipe.
Enicotarse . . .	30.	Screw Valve.
Enicure . . .	31.	Stuffing Box for No. 30.
Enidride . . .	32.	Follower on No. 31.
Eniellage . . .	33.	Packing Rings under No. 32.
Enigmar . . .	34.	Lever on No. 30.
Enigmatico . . .	35.	Collar on No. 28.
Enigmatist . . .	36.	Stud Bolts.
Enigmatize . . .	37.	Pin through Nos. 9 and 15.
Enigme . . .	38.	" " " 15 " 45.
Enimous . . .	39.	" " " 28 " 34.
Enimvero . . .	41.	Pressure Foot.
Eniousses . . .	42.	Guide Rod.
Enipei . . .	43.	Spring for No. 41.
Enipeos . . .	44.	Latch.
Enipeum . . .	45.	Starting Lever.
Enisurorum . . .	46.	Funnel for Overflow.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

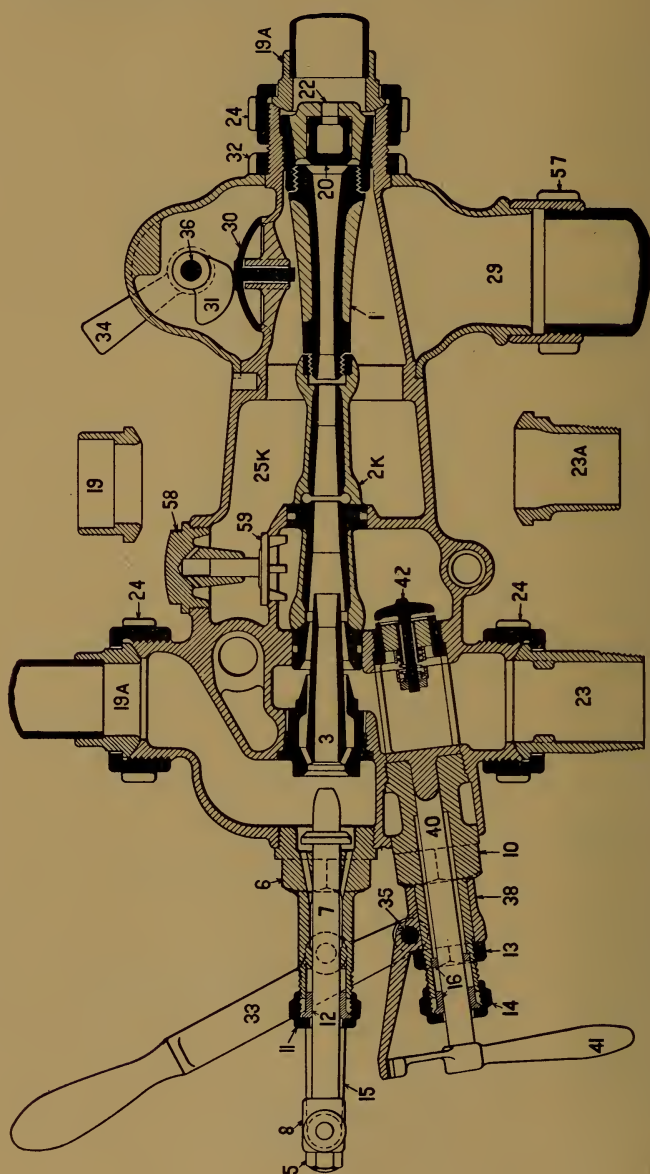
Sellers Injector, 1887

Plate 79. Enitebatur

Enitebunt . . .	1.	Delivery Tube.
Enitentem . . .	2.	Combining Tube.
Enitentis . . .	3.	Forcing Steam Nozzle.
Enithare . . .	4.	Lifting " "
Enivrant . . .	5.	Spindle Nut.
Enivrantés . . .	6.	Stuffing Box for Spindle.
Enivreráis . . .	7.	Spindle.
Enivriez . . .	8.	Crosshead.
Enivrons . . .	9.	Collar on No. 10.
Enixarum . . .	10.	Stuffing Box for Water Valve.
Enixionem . . .	11.	Follower for No. 6.
Enixionis . . .	12.	Packing Ring in No. 6.
Enixo . . .	13.	Lock Nut for No. 9.
Enjabegaba . . .	14.	Follower for No. 10.
Enjabegues . . .	15.	Links.
Enjabler . . .	16.	Packing Ring in No. 10.
Enjabonado . . .	17.	Water Valve.
Enjabonar . . .	18.	Ring in No. 17.
Enjaboneis . . .	19.	Plain Rings for Copper Pipe.
Enjabono . . .	20.	Check Valve.
Enjaezadas . . .	21.	Valve Stem for No. 17.
Enjaezado . . .	22.	Guide for No. 20.
Enjaezar . . .	23.	Plain Unions for Iron Pipes.
Enjaezaron . . .	24.	Coupling Nuts.
Enjaezeis . . .	25.	Injector Body.
Enjaezo . . .	26.	Hand Wheel on No. 21.
Enjail . . .	29.	Waste Pipe.
Enjailed . . .	30.	Waste Valve.
Enjailing . . .	31.	Cam for closing Waste Valve.
Enjalbega . . .	32.	Jam Nut for No. 29.
Enjaler . . .	33.	Starting Lever.
Enjalmada . . .	34.	Lever on Cam Shaft.
Enjalmados . . .	35.	Pin through No. 9. and No. 33.
Enjalmero . . .	36.	Cam Shaft.
Enjalmo . . .	38.	Index.
Enjambage . . .	39.	Funnel for Overflow.
Enjamber . . .	40.	Plug Water Valve.
Enjamberas . . .	41.	Regulating Handle.
Enjambons . . .	42.	Inlet Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

SELLERS CLASS K INJECTOR FOR HOT WATER



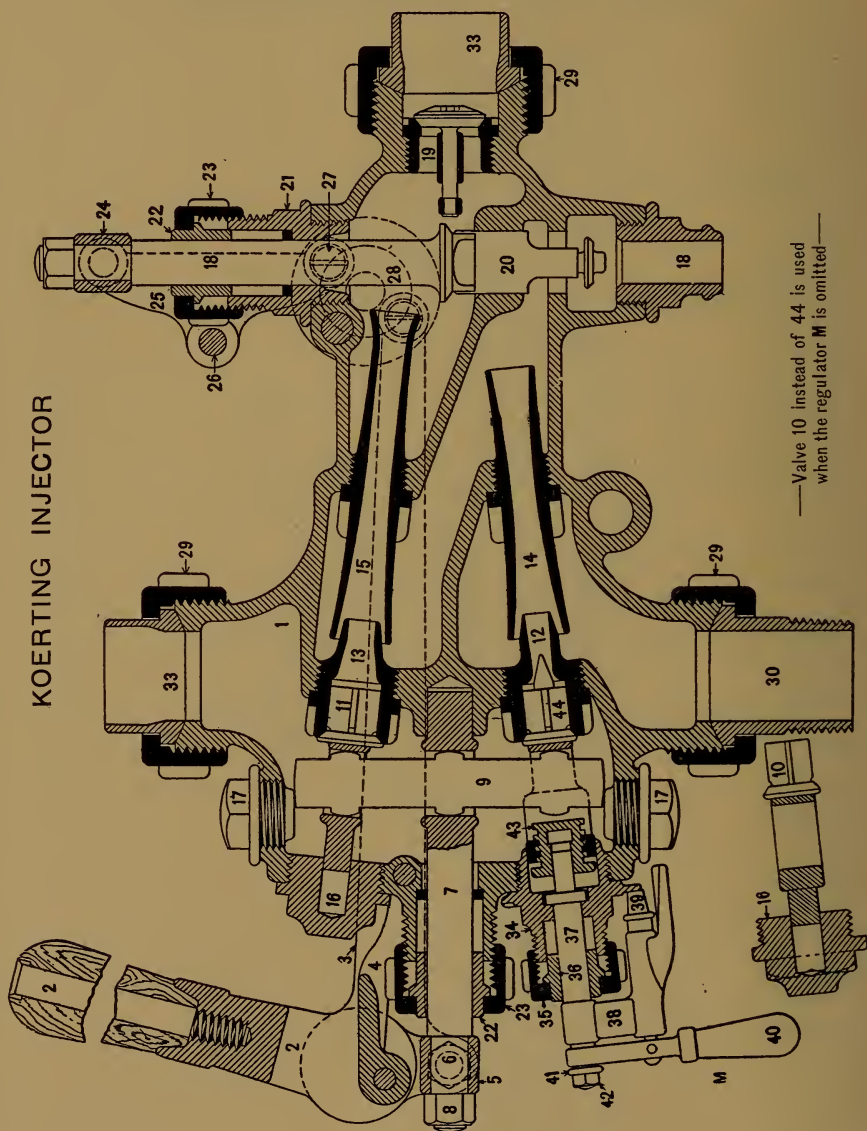
Sellers Self-Acting Injector, Improved Class K for Hot Water

Plate 80. Enjambrado

Enjambrar	. 1.	Delivery Tube.
Enjambreis	. 2K.	Combining Tube.
Enjangado	. 3.	Steam Nozzles.
Enjarcia	. . 5.	Spindle Nut.
Enjarciado	. 6.	Steam Stuffing Box.
Enjarciara	. 7.	Spindle.
Enjardinar	. 8.	Crosshead.
Enjardino	. . 10.	Water Stuffing Box.
Enjaretado	. 11.	Follower.
Enjaretar	. . 12.	Packing Ring.
Enjareteis	. . 13.	Lock Nut.
Enjarrete	. . 14.	Follower for No. 10.
Enjauger	. . 15.	Links.
Enjaulaban	. 16.	Packing Ring.
Enjauladas	. 19.	Plain Ring for Copper Pipe.
Enjaulado	. . 19a.	Reducing Ring for Copper Pipe.
Enjaular	. . 20.	Check Valve.
Enjaulemos	. 22.	Guide for No. 20.
Enjaulo	. . . 23.	Plain Union for Iron Pipe.
Enjeba	. . . 23a.	Reducing Union for Iron Pipe.
Enjebabas	. . 24.	Coupling Nuts.
Enjebado	. . 25K.	Injector Body.
Enjebasen	. . 27.	Wrench.
Enjergaban	. 29.	Waste Pipe.
Enjergais	. . 30.	Waste Valve.
Enjergo	. . . 31.	Waste Valve Cam.
Enjergue	. . 32.	Jam Nut for No. 29.
Enjoado	. . . 33.	Starting Lever.
Enjoailler	. . 34.	Cam Lever.
Enjoamente	. 35.	Pin, No. 38 and 33.
Enjoar	. . . 36.	Cam Shaft.
Enjoativo	. . 37.	Washer on 36.
Enjoignais	. 38.	Collar and Index.
Enjoigniez	. 40.	Plug Water Valve.
Enjoignons	. 41.	Regulating Handle.
Enjoindras	. 42.	Inlet Valve.
Enjoindre	. . 57.	Iron Overflow.
Enjoined	. . 57a.	Copper Overflow.
Enjoining	. . 58.	Cap over Hot Water Valve.
Enjoiment	. 59.	Hot Water Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

KOERTING INJECTOR



Koerting Injector

Plate 81. Enjolais

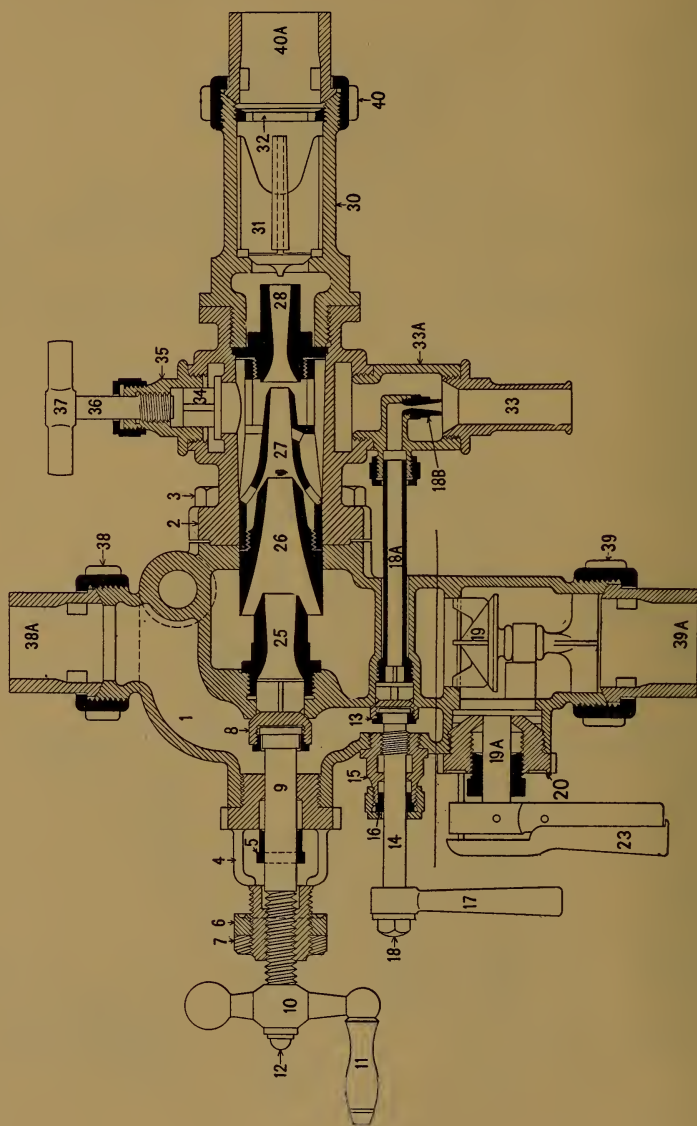
Enjolant . . .	1. Body.
Enjolasses . . .	2. Handle Lever Complete.
Enjolerai . . .	3. Side Rods, Right and Left.
Enjoleriez . . .	4. Connecting Link and Pins.
Enjoleront . . .	5. Crosshead for Starting Shaft.
Enjoleur . . .	6. Nuts for Crosshead.
Enjoliver . . .	7. Starting Shaft.
Enjolivre . . .	8. Nuts for Starting and Overflow Shafts.
Enjolons . . .	9. Yoke Bar.
Enjoncher . . .	10. Lower Steam Valve.
Enjonquer . . .	11. Upper " "
Enjoo . . .	12. Lower " Nozzle.
Enjoyabais . . .	13. Upper " "
Enjoyamos . . .	14. Lower Water " "
Enjoyaron . . .	15. Upper " "
Enjoyases . . .	16. " Front Body Cap. (Also Lower).
Enjoyeis . . .	17. Top and Bottom Body Caps.
Enjoyelado . . .	18. Overflow Nozzle.
Enjoyments . . .	19. Check Valve Complete.
Enjoys . . .	20. Overflow Valve Complete.
Enjuagado . . .	21. Overflow Stuffing Box.
Enjuagamos . . .	22. Followers for Stuffing Boxes.
Enjuagar . . .	23. Nuts for Stuffing Boxes
Enjuagaron . . .	24. Crosshead for Overflow Valve.
Enjuagueis . . .	25. Connecting Links for Overflow Valve.
Enjugada . . .	26. Pin for Connecting Links for Overflow Valve.
Enjugadero . . .	27. Screws " " " " "
Enjugadora . . .	28. Bell Cranks for Overflow Valve.
Enjugando . . .	29. Coupling Nuts.
Enjugare . . .	30. Unions for Iron Pipe.
Enjugaseis . . .	31. Spanner Wrench.
Enjugeraie . . .	33. Unions for Copper Pipe.
Enjuguemos . . .	34. Throttle Valve Stuffing Box.
Enjuiciais . . .	35. Nut for Stuffing Box.
Enjuicie . . .	36. Follower for Stuffing Box.
Enjuncaban . . .	37. Spindle for Throttle Valve.
Enjuncado . . .	38. Arm for Latch on Throttle Valve.
Enjuncais . . .	39. Latch.
Enjundia . . .	40. Handle.
Enjundioso . . .	41. Washer.
Enjuta . . .	42. Nut.
Enjutos . . .	43. Adjusting Screw.
Enkelinnen . . .	44. Throttle Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

If injectors do not have the regulator M, the parts including Nos. 34 to 44 are not wanted, and plain valve and cap substituted. Cap No. 16. Lower Steam Valve No. 10.

Plate 82

MONITOR INJECTOR



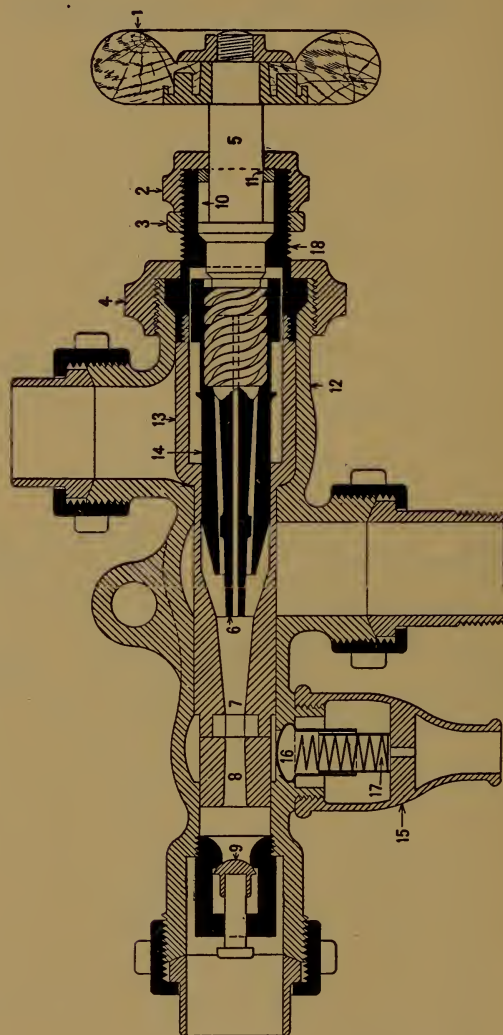
Monitor Injector

Plate 82. Enkels

Enkelvoud	1.	Body (Back Part).
Enkennel	2.	" (Front Part).
Enkernels	3.	" Screw.
Enkindling	4.	Yoke.
Enklauw	5.	" Gland.
Enklauwen	6.	" Packing Nut.
Enkratiten	7.	" Lock Nut.
Enkrinit	8.	Steam Valve Disc and Nut.
Enkystado	9.	" " Spindle.
Enkyste	10.	" " Handle.
Enlabiado	11.	" " Rubber Handle.
Enlabiamos	12.	" " Top Nut.
Enlabiar	13.	Jet Valve Disc and Nut.
Enlabiaron	14.	" " Spindle.
Enlabiasas	15.	" " Bonnet and Nut.
Enlabusar	16.	" " Gland.
Enlacador	17.	" " Lever Handle.
Enlacadura	18.	" " Top Nut.
Enlacement	18A.	" Tube.
Enlacerait	18B.	Lifting Nozzle.
Enlacieriez	19.	Water Valve.
Enlacons	19A.	Eccentric Spindle.
Enladrilla	20.	Water Valve Bonnet.
Enlaidir	23.	" " Lever Handle.
Enlaidisse	25.	Steam Nozzle.
Enlaidites	26.	Intermediate Nozzle.
Enlaivar	27.	Condensing "
Enlaminar	28.	Delivery "
Enlangour	30.	Line Check.
Enlapado	31.	" " Valve.
Enlarding	32.	Stop Ring.
Enlargedly	33.	Overflow Nozzle.
Enlarme	33A.	" Chamber with Nut.
Enlarmure	34.	Heater Cock Check.
Enlassure	35.	" " Bonnet and Nut.
Enlazadas	36.	" " Spindle.
Enlazadora	37.	" " T Handle.
Enlazaseis	38.	Coupling Nut, Steam End.
Enlazasen	38A.	Tail Piece, " "
Enlazemos	39.	Coupling Nut, Water End.
Enleague	39A.	Tail Piece, " "
Enleaguig	40.	Coupling Nut, Delivery End.
Enleiar	40A.	Tail Piece, " "

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

ECLIPSE INJECTOR



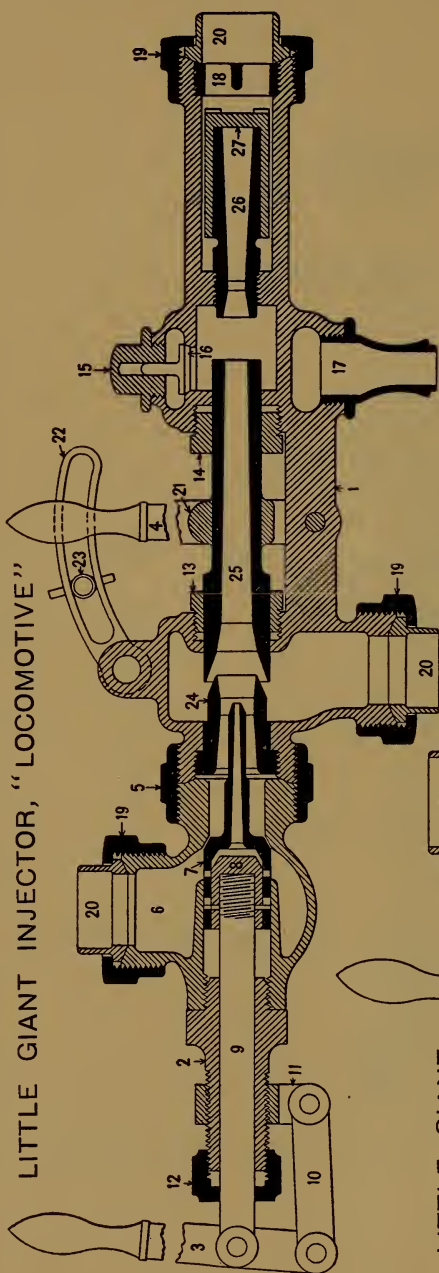
Eclipse Injector

Plate 83. Enleio

-
- | | | |
|------------------|-----|---|
| Enlengthen . . . | 1. | Handle of Regulating Valve. |
| Enlenzaba . . . | 2. | Small Nut holding in Stem. |
| Enlenzados . . . | 3. | Jam Nut. |
| Enlenzando . . . | 4. | Main Nut holding Injector in Shell. |
| Enlenzaron . . . | 5. | Stem. |
| Enlenzases . . . | 6. | Lifting Jet. |
| Enlenzeis . . . | 7. | Combining Tube. |
| Enlerdar . . . | 8. | Discharge Tube. |
| Enlevacao . . . | 9. | Check Valve. |
| Enlevage . . . | 10. | Space for Packing. |
| Enlevais . . . | 11. | Follower for confining Packing. |
| Enlevasses . . . | 12. | Shell. |
| Enlevront . . . | 13. | Body. |
| Enliasse . . . | 14. | Adjusting Tube regulating Water and Steam Supply. |
| Enlico . . . | 15. | Body of Overflow Valve. |
| Enlight . . . | 16. | Overflow Valve. |
| Enlighten . . . | 17. | “ “ Spring. |
| Enlighting . . . | 18. | Threaded End of Body. |

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

LITTLE GIANT INJECTOR, "LOCOMOTIVE"



LITTLE GIANT INJECTOR, 1889

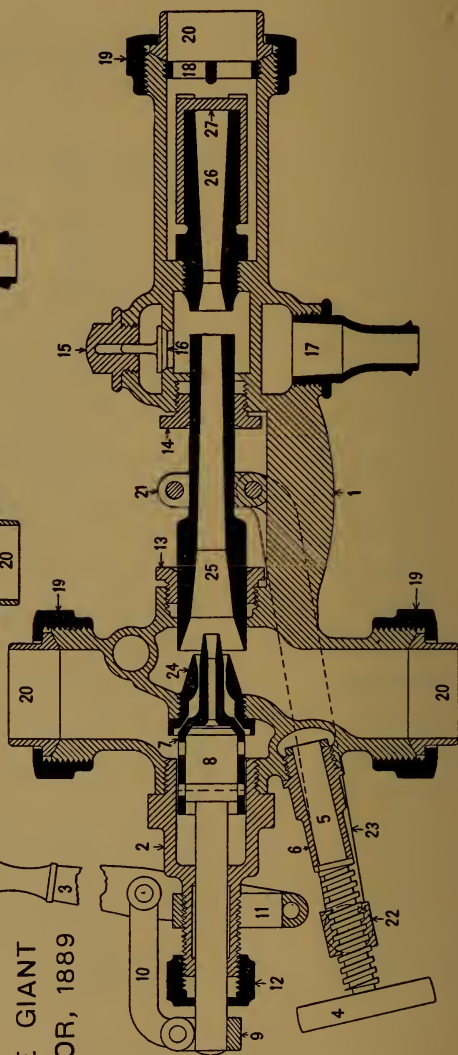


Plate 84.

Little Giant Injector, "Locomotive" Enligner

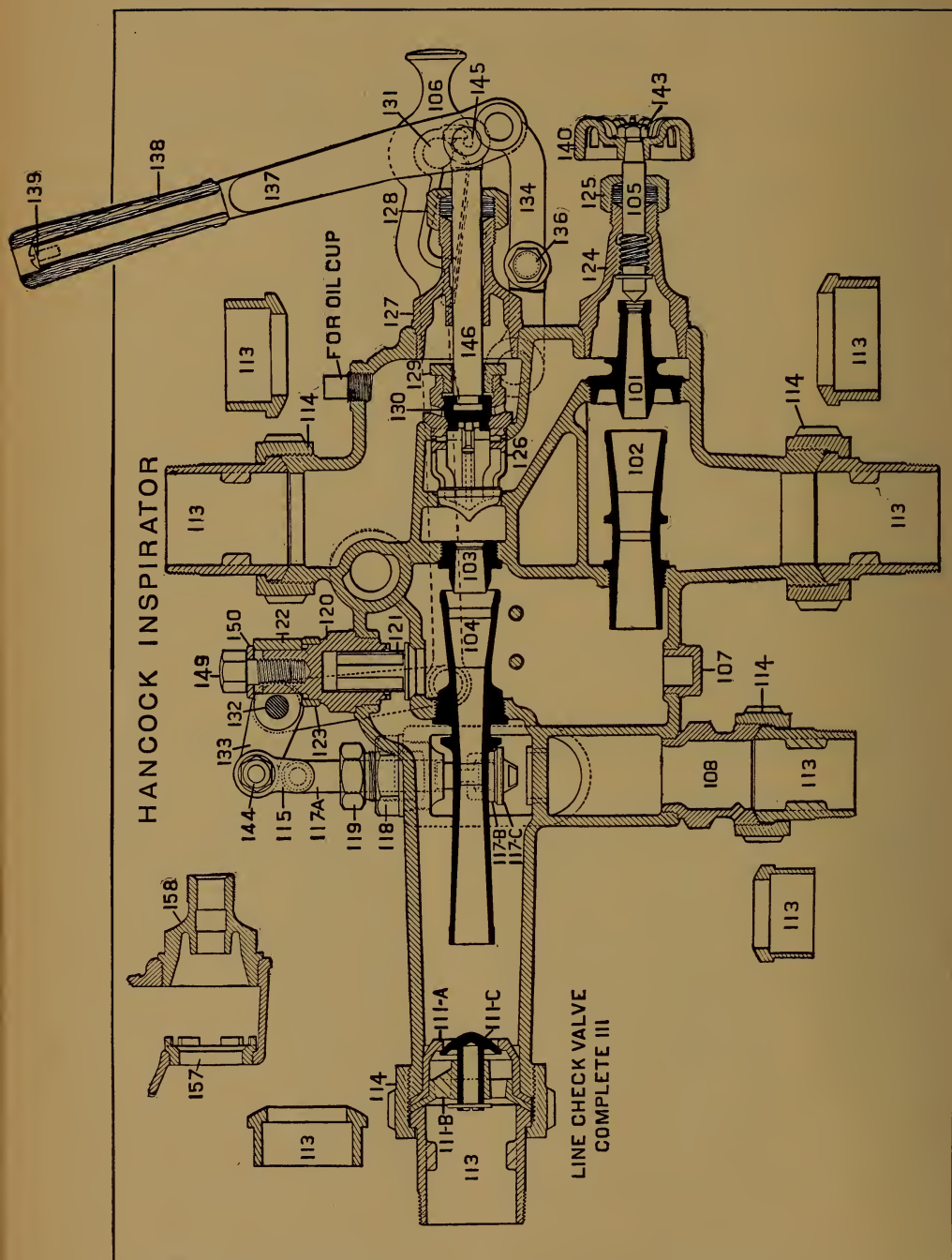
Enlink	1. Body.
Enlinked	2. Stuffing Box.
Enlinking	3. Starting Lever.
Enlist	4. Injector Lever.
Enlisting	5. Right and Left Nut.
Enlistment	6. Starting Valve Body.
Enliven	7. Main Steam Valve.
Enlivened	8. Jet Valve.
Enlivening	9. " " Stem.
Enlodabais	10. Starting Valve Link.
Enlodadas	11. Fulcrum.
Enlodado	12. Stuffing Box Nut.
Enlodamos	13. Large Packing Nut.
Enlodar	14. Small " "
Enlodarian	15. Overflow Cap.
Enlodaron	16. " Valve.
Enlodeis	17. " Nozzle.
Enloquecer	18. Check Valve Stop.
Enloquezcó	19. Coupling Nut.
Enlosados	20. Swivel.
Enloso	21. Combining Tube Clamp.
Enlourecer	22. Quadrant.
Enlouzar	23. Thumb Screw.
Enlumineur	24. Steam Tube.
Enluminos	25. Combining Tube.
Enlutabais	26. Discharge Tube.
Enlutado	27. Check Valve.

Little Giant Injector, 1889 Enlutamos

Enlutar	1. Body
Enlutarian	2. Stuffing Box.
Enlutaron	3. Starting Lever.
Enmaderare	4. Adjusting Wheel.
Enmadraba	5. " " Stem.
Enmadrados	6. " Stem Holder.
Enmadraron	7. Main Steam Valve.
Enmagrecia	8. Jet Valve.
Enmagrezca	9. " " Clamp.
Enmallaban	10. Starting Valve Link.
Enmallado	11. Fulcrum.
Enmallar	12. Stuffing Box Nut.
Enmallemos	13. Large Packing Nut.
Enmangaban	14. Small " "
Enmangado	15. Overflow Cap.
Enmangar	16. " Valve.
Enmantada	17. " Nozzle.
Enmantando	18. Check Valve Stop.
Enmantare	19. Coupling Nut.
Enmantases	20. Swivel.
Enmaranado	21. Combining Tube Clamp.
Enmaranar	22. Crosshead.
Enmaraneis	23. Side Bars.
Enmarble	24. Steam Tube.
Enmaromado	25. Combining Tube.
Enmaromar	26. Discharge Tube.
Enmaromeis	27. Check Valve.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

Plate 85



Hancock Inspirator

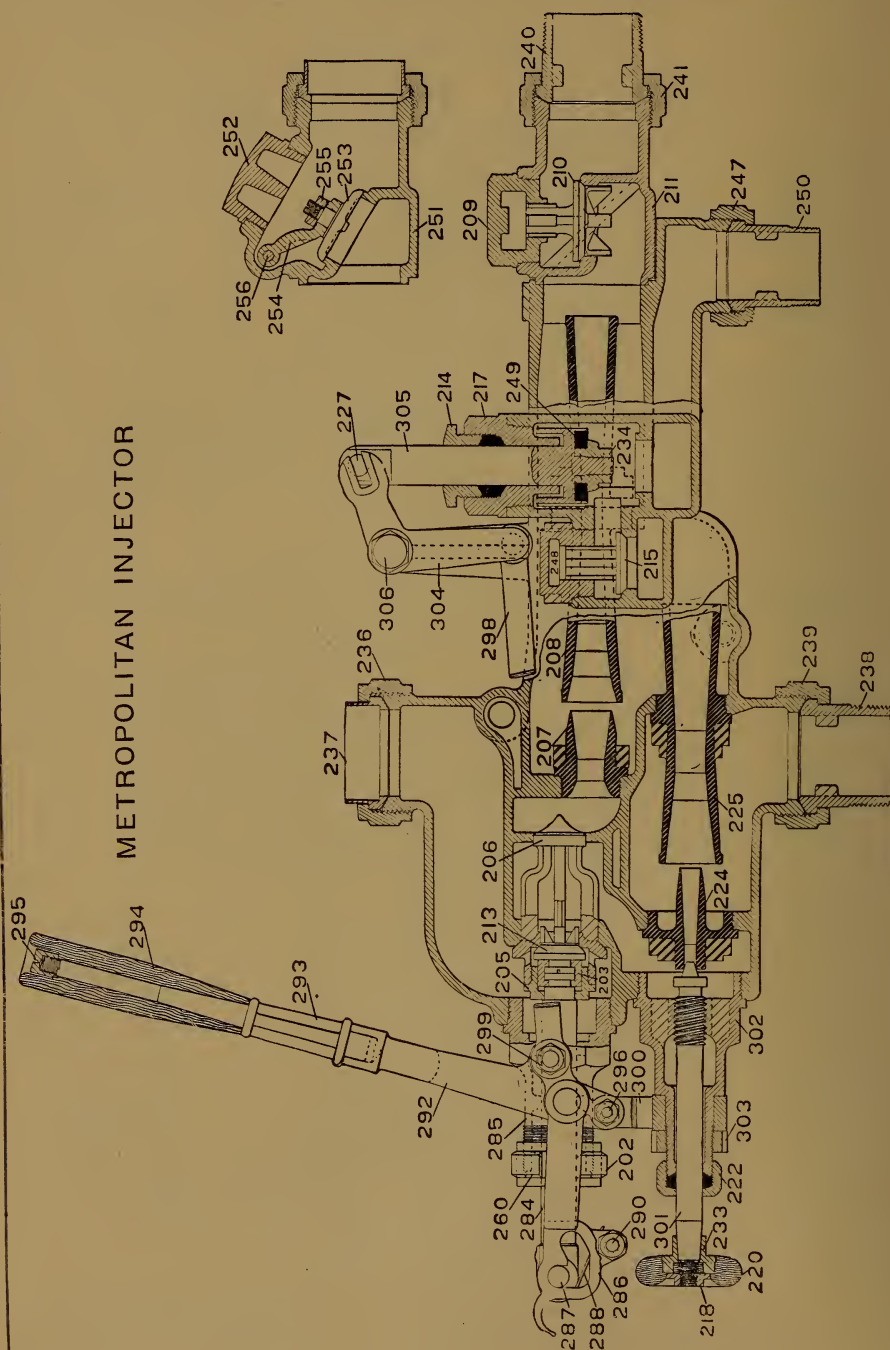
Plate 85. Enmaromo

Enmascaro . . .	101.	Lifter Steam Nozzle.	
Enmendaba . . .	102.	" Tube.	
Enmendador . . .	103.	Forcer, Steam Nozzle.	
Enmendamos . . .	104.	" Combining Tube.	
Enmendaron . . .	105.	Regulating Valve Spindle.	
Enmentres . . .	106.	Connecting Rod.	
Enmews . . .	107.	Clean-out Plug for Body.	
Enmienda . . .	108.	Overflow Nozzle.	
Enmities . . .	111.	Line Check Valve Complete.	
Enmoheceis . . .	111A.	Case for 111.	
Enmohecer . . .	111B.	Cage " "	
Enmohecido . . .	111C.	Valve for 111.	
Enmoves . . .	113.	Nipple for Steam Connection,	{
Enmudecias . . .	113.	" " Suction " "	
Enmudecido . . .	113.	" " Delivery " "	
Enmudezco . . .	113.	" " Overflow " "	{
Enmured . . .	114.	Coupling Nut Steam Connection.	
Enmuring . . .	114.	" " Suction " "	
Ennaeorum . . .	114.	" " Delivery " "	
Ennaeos . . .	114.	" " Overflow " "	
Ennaeteris . . .	115.	Connecting Link for Final Overflow Valve.	
Ennaeum . . .	116.	Steel Pin for 115.	
Ennarrheur . . .	117.	Final Overflow Valve, Complete.	
Ennasser . . .	117A.	" " " Stem.	
Ennastrar . . .	117B.	Nut for 117.	
Ennatar . . .	117C.	Disc " "	
Ennation . . .	118.	Bonnet for Final Overflow Valve.	
Enneacanto . . .	119.	Packing Nut for Final Overflow Valve.	
Enneacordo . . .	120.	Bonnet for Intermediate Overflow Valve.	
Enneacrundo . . .	121.	Intermediate Overflow Valve.	
Enneadici . . .	122.	Holder for Overflow Valve Crank.	
Enneadicos . . .	123.	Adjusting Ring.	
Enneaeeteri . . .	124.	Bonnet for Regulating Valve.	
Enneafillo . . .	125.	Packing Nut for Regulating Valve.	
Enneagonal . . .	126.	Forcer Steam Valve.	
Enneagono . . .	127.	Bonnet for Steam Valve.	
Enneander . . .	128.	Packing Nut for Steam Valve.	
Enneandria . . .	129.	Coupling Nut for 126.	
Enneandro . . .	130.	Lifter Steam Valve.	
Enneapogon . . .	131.	Steel Stud for Connecting Rod.	
Enneapyle . . .	132.	" " " 122 and 133.	
Enneatic . . .	133.	Crank for Overflow Valve.	
Enneatical . . .	134.	Side Strap, R. H.	
Ennegrecer . . .	135.	" " " L. H.	
Ennegrezco . . .	136.	Steel Bolt for 134 and 135.	
Enneige . . .	137.	Lever.	
Ennemi . . .	138.	Wood Handle for 137.	
Ennense . . .	139.	Screw for 137.	
Ennensibus . . .	140.	Rubber Wheel for 105.	
Ennensis . . .	143.	Steel Screw " "	
Ennensium . . .	144.	" Bolt " 115.	
Enneoctone . . .	145.	" Pin Connecting 137 and 146.	
Ennevoar . . .	146.	Steam Valve Stem.	
Ennia . . .	149.	Cap Screw for 120.	
Ennianista . . .	150.	Iron Washer for 120.	
Enniano . . .	157.	Steam Valve Seat.	
Ennianorum . . .	158.	Bonnet for Steam Valve.	

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

Plate 86

METROPOLITAN INJECTOR



Metropolitan Locomotive Injector

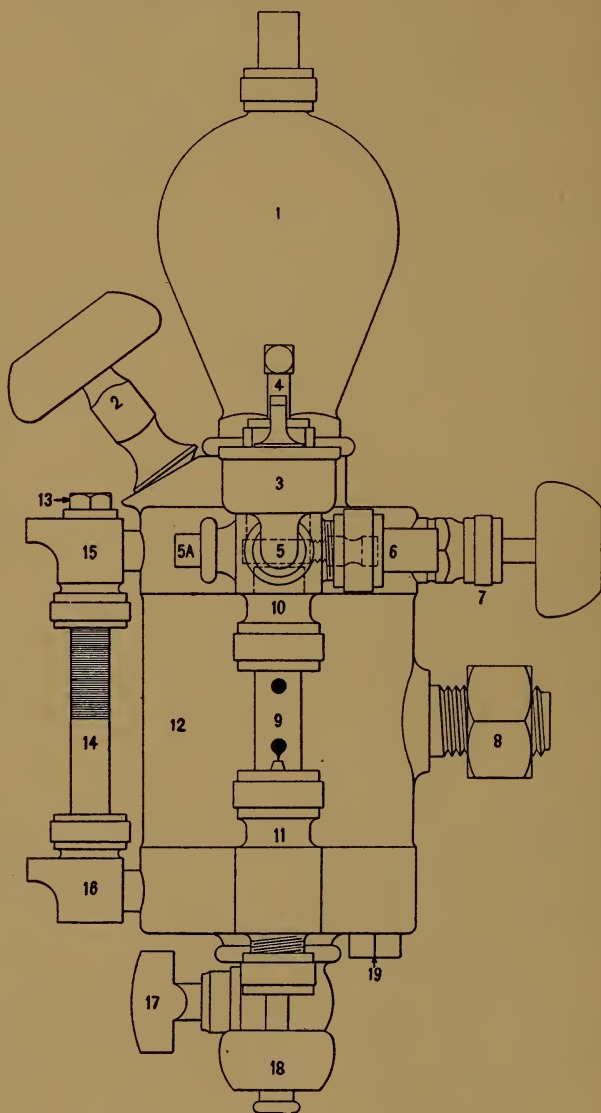
Plate 86. Ennoblecer

Ennoblezco . . .	202.	Packing Nut for No. 285.
Ennoblir . . .	203.	Champ Ring.
Ennobliras . . .	205.	Steam Swivel Ring.
Ennoblites . . .	206.	" Valve.
Ennodius . . .	207.	Forcing Steam Jet.
Ennoeme . . .	208.	" Combining Tube.
Ennoergie . . .	209.	Check Valve Cap.
Ennoicye . . .	210.	Check Valve.
Ennoitar . . .	211.	Check Valve Casing.
Ennomus . . .	213.	Auxiliary Steam Valve.
Ennosigaeo . . .	214.	Packing Gland for No. 305.
Ennovelar . . .	215.	Overflow Valve.
Ennoyage . . .	217.	" Center Piece.
Ennuvear . . .	218.	Regulating Valve Handle Nut.
Ennuyais . . .	220.	" " Wheel.
Ennuyante . . .	222.	Packing Nut for No. 302.
Ennuyasses . . .	224.	Lifting Steam Jet.
Ennuyerais . . .	225.	" Combining Tube.
Ennuyeux . . .	227.	Overflow Valve Pin.
Ennuyons . . .	231.	Stud Bolt.
Ennychie . . .	233.	Regulating Valve Wheel Disc.
Enodabamus . . .	234.	Nut for Overflow Disc.
Enodabilis . . .	236.	Union Nut, Steam End.
Enodandos . . .	237.	Tail Pipe, Steam End.
Enodantium . . .	238.	" " Suction End.
Enodaremus . . .	239.	Union Nut, Suction End.
Enodation . . .	240.	Tail Pipe, Delivery End.
Enodator . . .	241.	Union Nut, Delivery End.
Enodatoris . . .	245.	Nut for Stud Bolts.
Enodatorum . . .	247.	Union Nut for Overflow Nozzle.
Enodaturam . . .	248.	Overflow Valve Cap.
Enodatueros . . .	249.	Disc for Overflow Valve.
Enodaveris . . .	250.	Tail Pipe for Overflow Nozzle.
Enodavero . . .	260.	Steam Packing Gland.
Enoding . . .	284.	" Valve Stem.
Enodios . . .	285.	" Center Piece.
Enoiseler . . .	286.	Side Links.
Enojaba . . .	287.	Pin for Steam Stem.
Enojabamos . . .	288.	Spring.
Enojadas . . .	289.	Outflow Valve Crank Bolt Nut.
Enojadizas . . .	290.	Bolt for Side Links.
Enojamento . . .	291.	Nut for Bolt for Side Links.
Enojamos . . .	292.	Lever.
Enojariais . . .	293.	Handle Rod.
Enojarian . . .	294.	Wood Handle.
Enojaron . . .	295.	Handle Nut.
Enojosas . . .	296.	Fulcrum Bolt.
Enojoso . . .	297.	Nut for Fulcrum Bolt.
Enojuelo . . .	298.	Connecting Bar.
Enologia . . .	299.	Nut for Connecting Bar.
Enologista . . .	300.	Fulcrum Collar.
Enomancia . . .	301.	Regulating Steam Stem.
Enometro . . .	302.	" Center Piece.
Enomotarch . . .	303.	Fulcrum Nut.
Enomphalo . . .	304.	Overflow Valve Crank.
Enoncer . . .	305.	" " Stem.
Enonceriez . . .	306.	" " Crank Bolt.

In ordering parts for injector, give in all cases the maker's number stamped on the injector.

Plate 87

NATHAN SIGHT FEED CYLINDER LUBRICATOR



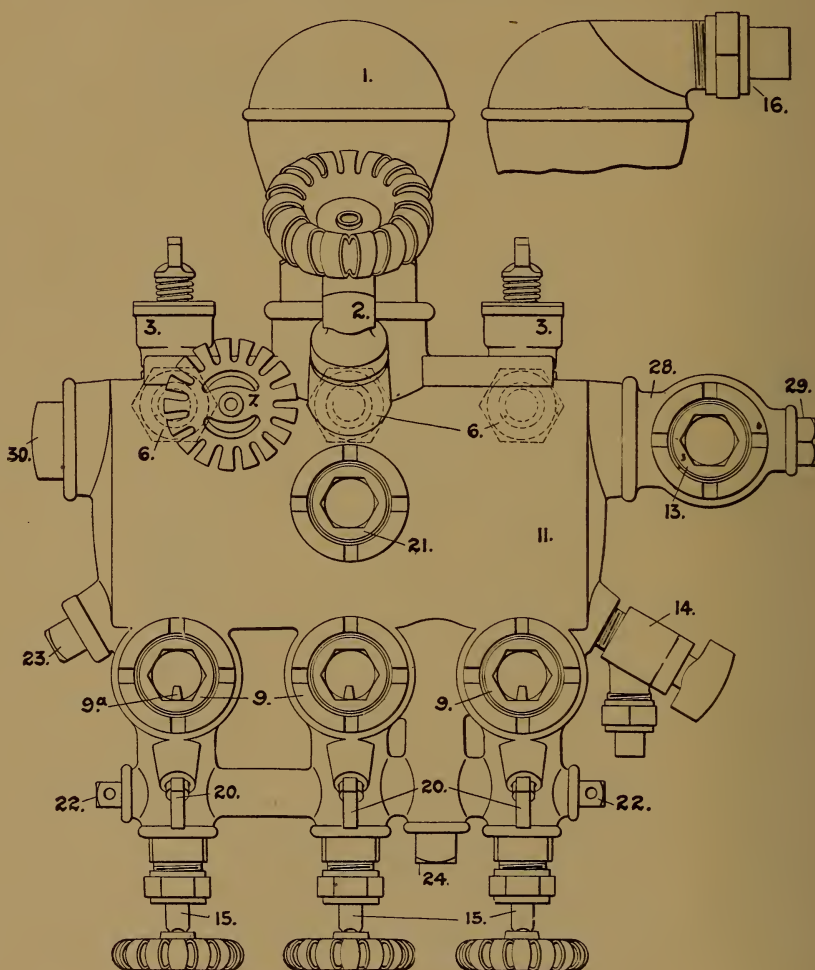
Nathan Sight Feed Cylinder Lubricator

Plate 87. Enoncerons

Enonciatif . . .	1. Condenser.
Enonciez . . .	2. Filling Plug.
Enophilo . . .	3. Auxiliary Oiler.
Enophobia . . .	4. Safety Valve.
Enophorias . . .	5. Reducing Plug.
Enopliens . . .	5A. Blow-off “
Enoplocere . . .	6. Delivery Nut and Coupling
Enoplops . . .	7. Water Valve.
Enopta . . .	8. Stud Nut.
Enorchibus . . .	9. Sight Feed Glass.
Enorme . . .	10. Upper Sight Bracket and Nut.
Enormement, 11.	Lower “ “ “ “
Enormezza . . .	12. Body.
Enormidade . . .	13. Gauge Glass Plug.
Enormiorem . . .	14. “ Glass.
Enormioris . . .	15. Upper Gauge Bracket and Nut.
Enormity . . .	16. Lower “ “ “ “
Enormous . . .	17. Waste Cock.
Enormously . . .	18. Regulating Valve.
Enoscopio . . .	19. Bottom Plug.

Plate 88

NATHAN TRIPLE SIGHT FEED CYLINDER LUBRICATOR BULL'S EYE TYPE 166-F-3



Nathan Triple Sight Feed Cylinder Lubricator Bull's Eye Type 166-F-3

Plate 88. Enostose

-
- | | | |
|------------------|-----|------------------------------|
| Enotabamur . . . | 1. | Condenser. |
| Enotaremur . . . | 2. | Filling Plug. |
| Enotatas . . . | 3. | Hand Oiler. |
| Enotatura . . . | 5. | Reducing Plug. |
| Enotaturis . . . | 6. | Delivery Nut and Tailpiece. |
| Enotescis . . . | 7. | Water Valve. |
| Enotesco . . . | 8. | Stud Nut. |
| Enotomies . . . | 9. | Sight Feed Glass and Casing. |
| Enotomy . . . | 9A. | Feed Nozzle. |
| Enotria . . . | 11. | Body. |
| Enotuerunt . . . | 13. | Gauge Glass and Casing. |
| Enouage . . . | 14. | Waste Cock. |
| Enoueur . . . | 15. | Regulating Valve. |
| Enouricar . . . | 16. | Top Connection. |
| Enpatron . . . | 17. | Equalizing Pipe. |
| Enpatroned . . . | 18. | Oil Pipe. |
| Enpierces . . . | 19. | Water Pipe. |
| Enquerais . . . | 20. | Sight Feed Drain Valve. |
| Enquerant . . . | 21. | Reserve Glass and Casing. |
| Enquerir . . . | 22. | Cleaning Plug (Body). |
| Enquerriez . . . | 23. | Body Plug. |
| Enquerront . . . | 24. | Oil Pipe Plug. |
| Enquest . . . | 28. | Gauge Glass Bracket. |
| Enquester . . . | 29. | Cleaning Plug (Gauge Glass). |
| Enquesting . . . | 30. | Gauge Glass Cap. |

Plate 89

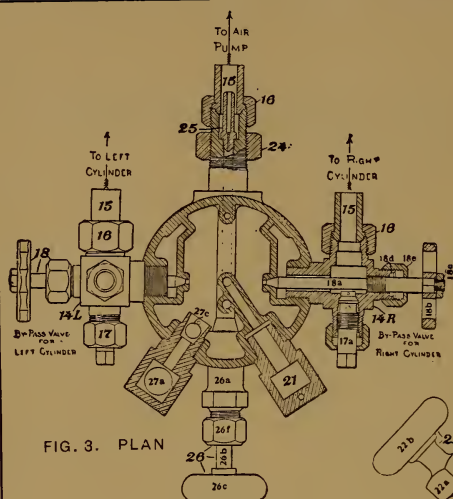


FIG. 3. PLAN

PLAN VIEW

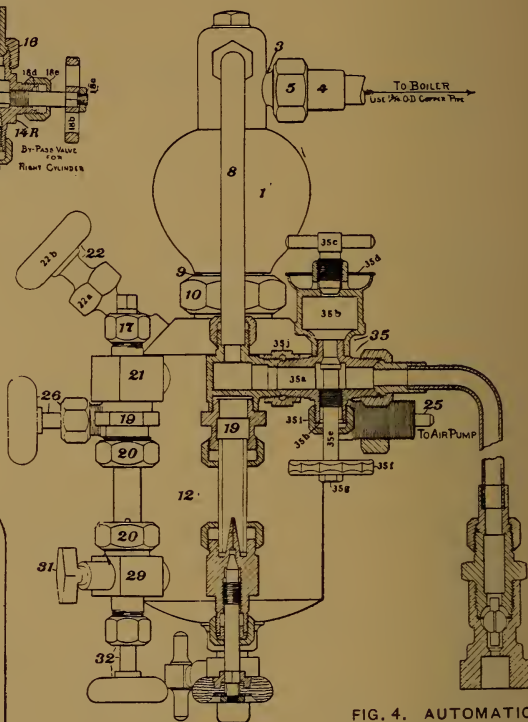


FIG. 2
SIDE ELEVATION

FIG. 4. AUTOMATIC
STEAM CHEST VALVE

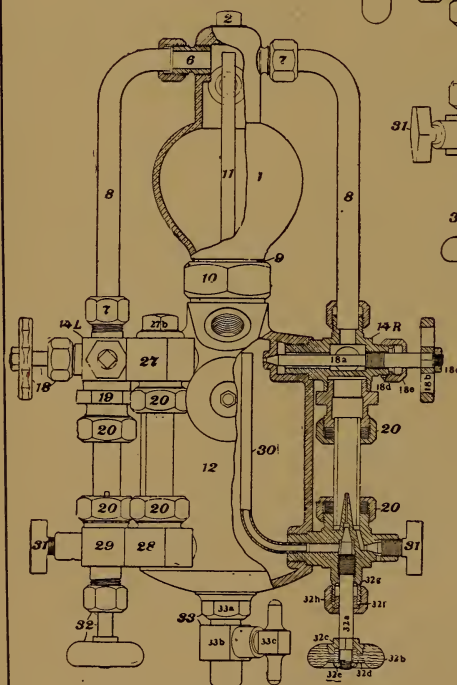


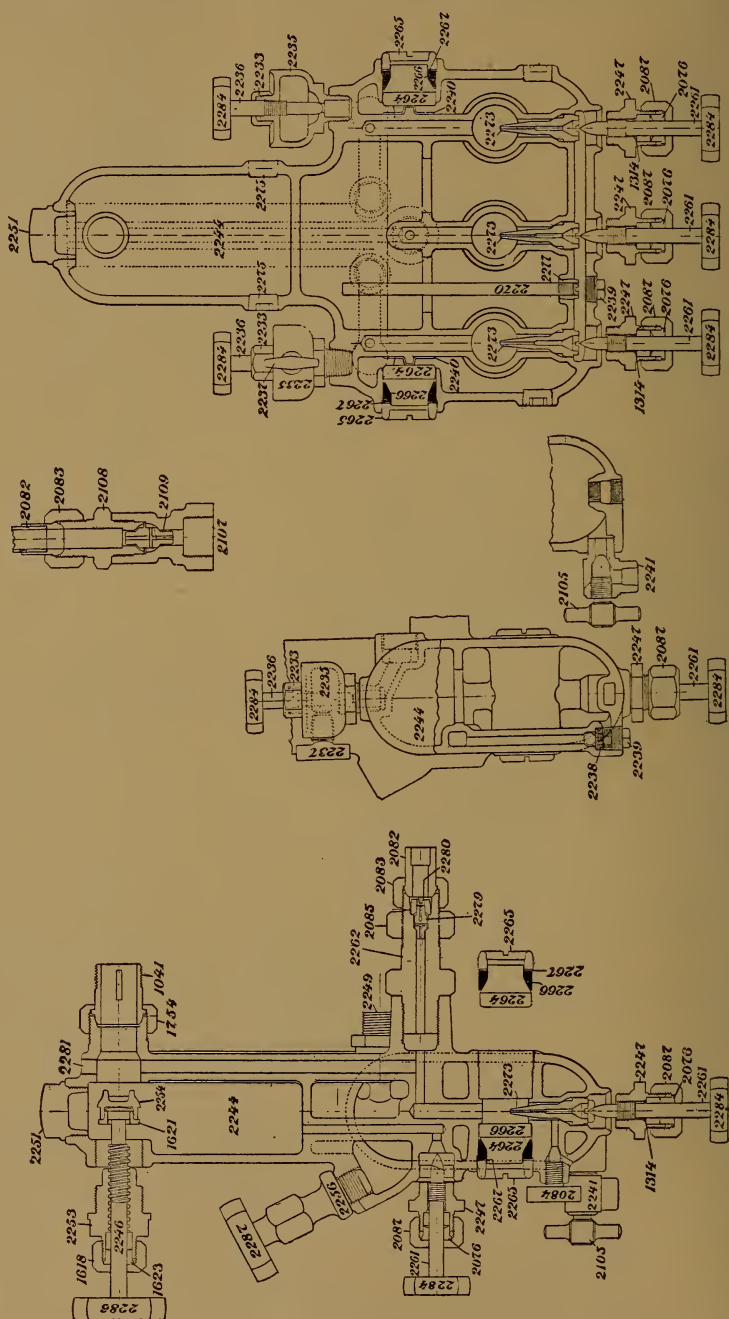
FIG. 1. FRONT ELEVATION

Enquiciado	1.	Condenser.
Enquiciar	2.	" Plug.
Enquicieis	3.	Boiler Nipple.
Enquicio	4.	" " Tail Pipe.
Enquicken	5.	" " " " Nut.
Enquiers	6.	Equalizing Tube Nipple.
Enquimes	7.	" " " " Nut.
Enquistado	8.	" Tube.
Enquistar	9.	Condenser Tail Pipe.
Enquisto	10.	" " " " Nut.
Enraciner	11.	Air Brake Equalizing Tube.
Enrageais	12.	Oil Reservoir.
Enrageant	13.	Water Tube, complete.
Enragions	14 R.	Upper Feed Arm, Right.
Enraivecer	14 L.	" " " Left.
Enraleceis	15.	Tail Pipe.
Enraleci	16.	" " " Nut.
Enramabais	17.	Automatic Safety Valve, complete.
Enramada	17A.	Stem.
Enramados	17B.	Check.
Enramarian	17C.	Bush Ring.
Enramaron	17D.	Packing Nut.
Enrameis	18.	By-Pass Valve, R or L Cylinder, complete.
Enramer	18A.	Stem.
Enrancar	18B.	" Handle.
Enranciado	18C.	" " " Nut.
Enrancieis	18D.	" Bush Ring.
Enrancio	18E.	" Packing Nut.
Enrange	19.	Extension Sleeve.
Enranked	20.	Packing Nut.
Enranking	21.	Upper Air Brake Arm.
Enraps	22.	Filler Plug, complete.
Enrareces	22A.	" Plug.
Enrarecias	22B.	" " Handle.
Enrarecido	23.	By-Pass Valve for Air Brake, complete.
Enrarezco	23A.	Centre Piece.
Enrastraba	23B.	Stem.
Enrastrar	23C.	Handle.
Enrastro	23D.	" " Nut.
Enravish	23F.	Packing Nut.
Enravished	24.	Support Arm Nut.
Enrayasen	25.	Air-Brake Nozzle.
Enrayasses	26.	Water Valve, complete.
Enrayement	26A.	Center Piece.
Enrayemos	26B.	Stem.
Enrayeras	26C.	Handle.
Enrayo	26F.	Packing Nut.
Enrayoir	27.	Upper Gauge Arm, complete.
Enredaba	27A.	" " " Arm.
Enredadera	27B.	" " " " Packing.
Enredamos	27C.	" " " " Ball Check.
Enredarian	28.	Lower Gauge Arm, complete.
Enredeis	29.	" Feed Arm.
Enredijo	30.	Oil Tube.
Enredosas	31.	Vent Stem.
Enredoso	32.	Regulating Valve, complete.
Enregelar	32A.	Stem.
Enrehojaba	32B.	Handle.
Enrehogar	32C.	" Plate.
Enrehojeis	32D.	" Washer.
Enrehoyo	32E.	" " " Nut.
Enrejada	32F.	Gland.
Enrejados	32G.	Bush Ring.
Enrejaseis	32H.	Packing Nut.
Enrejasen	33.	Drain Valve, complete.
Enrejemos	33A.	" " " Seat.
Enrenant	33B.	" " " Body.
Enrenoire	33C.	" " " Stem.

Detroit No. 3-C Locomotive Lubricator

Plate 89 Enqueter

Plate 90



Detroit No. 21 Locomotive Lubricator

Plate 90. Enresinado

Enresinar	1041.	1-inch Tail Pipe.
Enrestar	1314.	Feed Stem Ring.
Enrevesado	1618.	Steam Valve Packing Nut.
Enrheum	1621.	" " Disc Lock Nut.
Enrheumed	1623.	" " Gland.
Enrheuming	1754.	1-inch Tail Nut.
Enrhumais	2076.	Feed Valve Gland.
Enrhumiez	2082.	Tail Pipe.
Enrhumions	2083.	" Nut.
Enrhythmos	2084.	Vent Stems.
Enrich	2085.	Support Arm Jamb Nut.
Enrichetta	2087.	Feed Valve Stem Nuts.
Enrichimes	2105.	Drain Stem.
Enrichir	2107.	Steam Chest Valve Body.
Enrichiras	2108.	" " " Cap.
Enrichment	2109.	" " " Check, $\frac{5}{64}$ inches.
Enrielados	2233.	Hand Oiler, Packing Nut.
Enrielaron	2235.	" " Body.
Enrielases	2236.	" " Stem.
Enrieleis	2237.	" " Filler Plug.
Enripen	2238.	Water Check Stop.
Enripened	2239.	$1\frac{1}{16}$ Plugs.
Enripening	2240.	Gauge Glass Reflector.
Enripiadas	2241.	Drain Valve Body.
Enripiado	2246.	Steam Valve Stem.
Enripiar	2247.	Feed Valve Center Piece.
Enripiasen	2249.	Tallow Pipe " "
Enripiemos	2251.	Condenser Plug.
Enripio	2253.	Steam Valve Center Piece.
Enriquecer	2254.	" " Disc.
Enriquezco	2256.	Filler Plug.
Enriscadas	2261.	Feed Valve Stem.
Enriscado	2262.	Support Arm.
Enriscamos	2264.	Sight Feed Glass.
Enrisque	2265.	Feed Glass Packing Ring.
Enrisqueis	2266.	Rubber Packing.
Enristreis	2267.	Feed Glass Washer.
Enritmo	2270.	Oil Tube.
Enrived	2273.	Feed Nozzle.
Enriving	2277.	Oil Tube Bushing.
Enrobage	2279.	Air Brake Check.
Enrobing	2280.	Check Seat.
Enrocabas	2284.	Regulating Valve Handle.
Enrocado	2285.	Hand Oiler Handle.
Enrocaseis	2286.	Steam Valve Handle.
Enrocher	2287.	Filler Handle.

UNITED STATES METALLIC PACKING FOR PISTON RODS

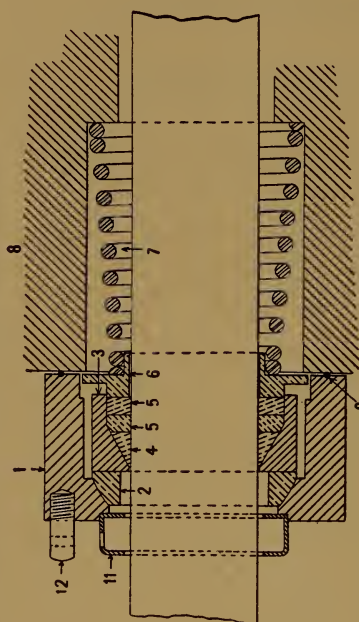
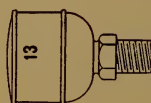
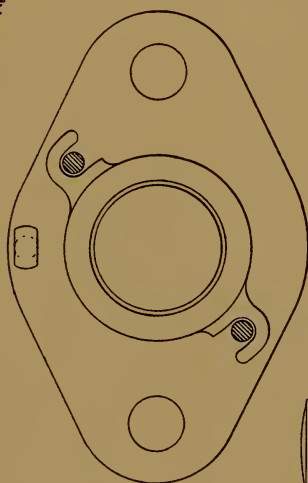


Fig. 1



JEROME METALLIC PACKING FOR PISTON RODS

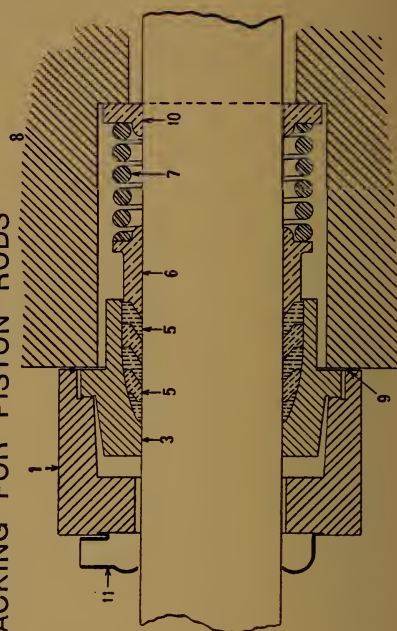
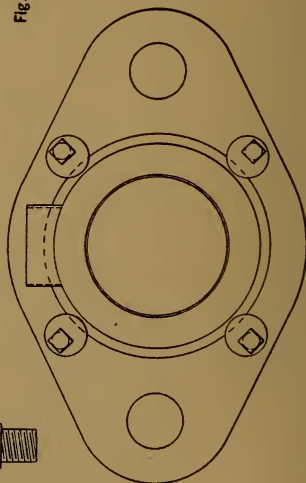


Fig. 2



Metallic Piston Rod Packing

Plate 91. Enrockment

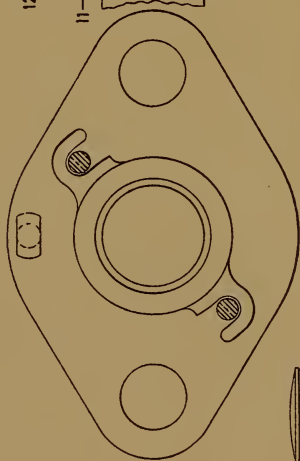
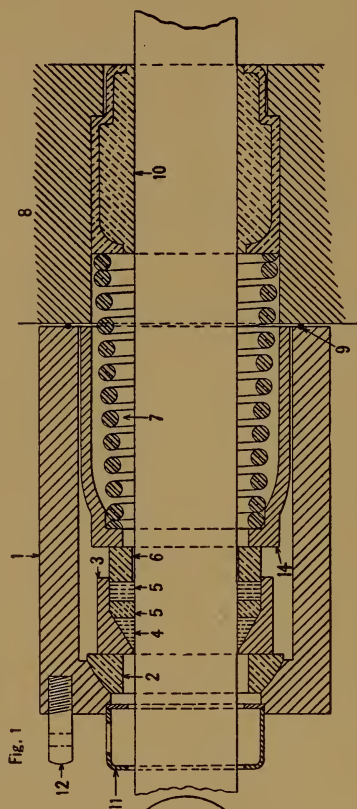
FIG. 1.—Enroco

FIG. 2.—Enrodabais

Enrodada . .	1. Packing Case.
Enrodaron . .	2. Ball Joint.
Enrodelado . .	3. Vibrating Cup.
Enrodilhar . .	4. Babbitt Ring.
Enrodrigar . .	5. “ “
Enrodrigo . .	6. Follower.
Enrojeceis . .	7. Coil Spring.
Enrojecer . .	8. Stuffing Box.
Enrojecido . .	9. Copper Wire Joint.
Enrojezco . .	10. Neck Ring.
Enrol	11. Swab Holder.
Enrolar . . .	12. Oil Cup Bracket.
Enroleriez . .	13. “ Cup.

In ordering repairs, give in all cases the number stamped on packing case.

UNITED STATES METALLIC PACKING FOR VALVE STEMS



JEROME METALLIC PACKING FOR VALVE STEMS

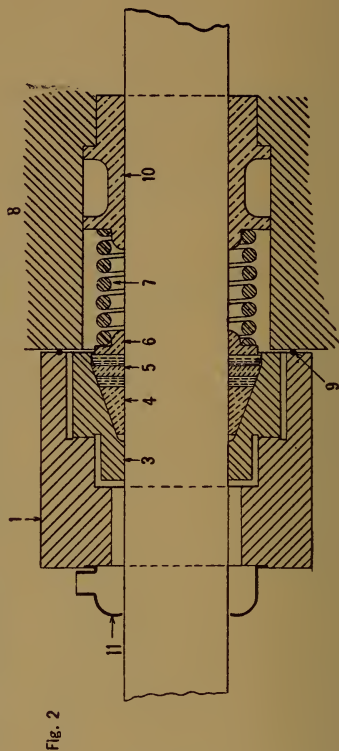
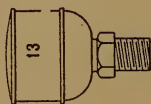
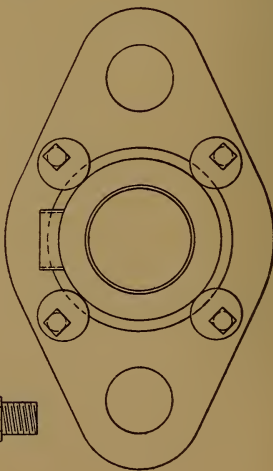


Fig. 2



Metallic Valve Stem Packing

Plate 92. Enroleront

FIG. 1.—Enrolions

FIG. 2.—Enrolladas

Enrolled . . .	1.	Packing Case.
Enrolleis . . .	2.	Ball Joint.
Enrolling . . .	3.	Vibrating Cup.
Enrolment . . .	4.	Babbitt Ring.
Enronqueci . . .	5.	“ “
Enroot . . .	6.	Follower.
Enrooted . . .	7.	Coil Spring.
Enrooting . . .	8.	Stuffing Box.
Enroque . . .	9.	Copper Wire Joint.
Enroqueis . . .	10.	Bushing.
Enroquemos . . .	11.	Swab Holder.
Enroscada . . .	12.	Oil Cup Bracket.
Enroscados . . .	13.	“ Cup.
Enroscando . . .	14.	Preventer.

In ordering repairs, give in all cases the number stamped on packing case.

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